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Editorial Notes

A FREE-LANCE journal has many advantages over those which are the organs of learned bodies. One is that, in order to keep going at all, it must be read. The moment it becomes dull it is doomed. That does not mean, fortunately, that we cannot publish occasional articles intended mainly for specialists; they all read *ANTIQUITY*, and have claims to consideration on that ground at least. It means, however, that the Editor must keep his hand on his readers' pulse; and the moment he observes any weakening of interest must find out the cause and eradicate it. This need does not operate upon subsidized publications. (Need we add that there is ample room for both?).



But how to discover where that interest lies? Readers seem, from their letters, to fall into two groups, westerners and easterners (just as in the war). The westerners call for more articles about British archaeology; the easterners retort that for several millennia western Europe was a mere barbaric fringe on the outskirts of a civilization created by the peoples of the east and of the Mediterranean. Our policy is to try and hold the balance between these two groups, giving to each something of what it wants. It is not a case where rigid or final judgments should be made. The interest of the historical

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evolution of one's own homeland has obvious claims (as it has also obvious risks, if over-indulged). When that country has also played an important part upon the stage of general history, that interest may well be allowed fairly full play. But for the same reason the ' heirs of all the ages ' should know something about those ages ; agriculture and urban civilization were created not in western Europe but in the fertile valleys of the east.



But it is by no means easy, having discovered what one wants, to find the man to write the article. For example, we wanted, and still want, an article summarizing what is known of the economy of the Sumerian city-temple. This was a vital organ in the life of the city-state, the earliest urban community in the world's history. Since the majority of clay tablets are business letters and contracts, there should by now have accumulated a fair amount of information on this fundamental matter. Indeed, according to Dr Woolley,* writing itself arose from business needs. So far, however, we have failed to obtain that article. One of the probable reasons is that there are few posts available for the study of cuneiform, and those who hold them are either overworked by routine or mentally incapable of a generalized treatment of their subject ; for we really cannot accept the excuse made by one non-starter that the economics of early Sumeria are still a closed book.



Articles which give one a bird's-eye view of some department of highly specialized knowledge are at once the most difficult to write and to obtain for publication ; for they demand considerable literary powers, a wide range of knowledge, and a breadth of outlook—faculties not often combined in one brain. It is usual to label such articles ' popular ', and that they certainly are ; but the epithet is also used in a disparaging sense—' merely popular '. How often have we heard an admirable book thus condemned ! No one would think of finding fault with a small scale map because it did not provide him with a plan of his estate or home-town ; it is not intended to do so. To get this he must buy another sort of map altogether (a cadastral map like the

* Address to the English Association, reported in *Manchester Guardian* and *Morning Post*, 2 June.

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6-inch or 25-inch Ordnance Map). It is recognized that different scales are required for different purposes ; and that to describe, say, the half-inch-to-the-mile one as *merely* a small scale map would be absurd. But it is just as absurd to decry a small scale verbal description —always providing of course that it is based upon a large scale knowledge of the subject-matter.



Generally speaking however we have been able to obtain the sort of article we want, even though we may have had to wait years for it. But there are some for which we and our readers are still waiting, as we know from their letters. We have not been able to get a summary of the main features of the Indus civilization, for instance ; nor have we been able to find anyone to describe the characteristics of prehistoric British dogs.



There are whole cultures we have never touched upon—such as are represented by the ruins of Angkor in Cambodia, Anuradhapura in Ceylon, Barabudur in Java ; and except in reviews we have published little or nothing about Stein's Central Asia (as it well may be called), Southern Arabia (the Hadramaut and Yemen), Abyssinia and its phallic megaliths discovered by Father Azais. A note in the present number shows that Nigeria has had a history ; we should not be surprised one day to learn that it was a very long one. East Africa contains much that has never been mentioned in print. What we want is not the notes of a tourist illustrated by bad snapshots, but something that will tell us what was the place in history of the remains in question ; and it must be written from first-hand knowledge.



It was once quite usual for archaeologists to abuse the State for its failure to support their own branch of science. The amount spent upon past records of civilization is still negligible compared with what is spent in destroying civilization itself. We think that Authority still does not realize how rapidly public opinion has moved since the War ; and that it would be supported if it spent more upon science and less

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upon literary curios. Meanwhile it is gratifying that a service of antiquities for the island of Cyprus is likely to be established (*The Times*, 19 July, p. 15) and that prehistoric archaeology is officially recognized in the last award of Civil List pensions (*The Times*, 18 July, p. 8). So far, so good.



One often wonders whether Authority realizes what a good return it gets for its modest outlay—how much work it gets for nothing, how much overtime, how much voluntary enthusiasm. Only those ‘in the know’ can appreciate this and it would be improper for the present writer to enlarge upon it. He has daily evidence of it, however, in his official correspondence and his experience is shared by others of his profession. The standard set by the present generation of archaeologists is admittedly high and lapses from it occur but rarely.



We had hoped to include in the present number a review of Monsieur Poidebard's splendid book describing the really epoch-making discoveries he has made in Syria by means of air-photography and air reconnaissance. The review has been written but the illustrations that were to accompany it are still not forthcoming. For this failure the publisher of the book is alone responsible.



We have lately issued a letter to some former subscribers who for one reason and another—in most cases an economic one—have (since 1927) felt obliged to discontinue ANTIQUITY. In the letter we expressed the hope, that in view of the more favourable outlook in home affairs, they would now renew their support. We are glad (for their sakes and our's), to say this has resulted in some renewals, though not so many as we could wish. In one case a subscriber who was unable to attend an archaeological meeting thought that a year's ANTIQUITY might take its place, and this suggests a hint to others who may, for various reasons, be obliged to forgo some pleasure of the same kind that they can secure a whole year's antiquarian enjoyment at the cost of a pound note.

Some Ancient Italian Country-Houses

by R. C. CARRINGTON

IT is a matter for surprise that none but the vaguest idea can be gleaned from ancient writers of the appearance or plan of an ordinary farm-house in the ancient world. Cato, Varro, Columella, the Elder Pliny, and Palladius describe with varying degrees of detail the kind of site on which such a house might most suitably be built and the type of rooms required for those who inhabit it. They indicate the uses to which the various portions of the house were put (*villa urbana*, *villa rustica*, *villa fructuaria*) but none of them thought it necessary to describe methodically the lay-out of the house as a whole. Varro mentions incidentally a 'cohors' (cortile or farm-yard) and states that on a large farm it is more convenient to have two such areas, one for the kitchen and tool-sheds, the other for live-stock. Varro's remark is vague enough, but the notices of other writers are even vaguer. The younger Pliny sets out to give a detailed description of his Laurentine villa, but the attempts of modern scholars to reconstruct the plan of the villa from Pliny's description have produced the most varied results and shown the futility of the quest.¹

When the written word fails we turn perforce to the spade. The purpose of this paper is, not to survey or even mention all Italian country-houses that have ever been excavated, but to examine a single group which has been uncovered round the shore of the Bay of Naples. The eruption of Vesuvius in A.D. 79 devastated much of the countryside to the west and south of the volcano. From Portici in the northwest to the lower slopes of Monte Sant'Angelo in the south was a scene of vast desolation and all the country-houses which lay within these limits were involved in the general ruin. Up to the present, about forty of them have been excavated.² They were of various economic types—

¹ Helen H. Tanzer, *The Villas of Pliny the Younger* (Columbia Univ. Press, 1924).

² A list of them, with bibliographical details, is given by Rostovtzeff, *The Social and Economic History of the Roman Empire*, pp. 496-7. Rostovtzeff's list has been slightly enlarged by Day, 'Agriculture in the Life of Pompeii', *Yale Classical Studies*, 1932, III, 165 ff. For convenience of reference, the numbers assigned in Rostovtzeff's list to the villas discussed in this paper are here appended:—No. 1=R.25; no. 2=R.29; no. 3=R.30; no. 4=R.27; no. 5=R.1; no. 6=R.10; no. 7=R.13; no. 8=R.16; no. 9=R.34; no. 10=R.31; no. 11=R.24; no. 12=R.5; no. 13=R.33.

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one was a farm-house, owned by a well-to-do peasant, who lived on it and personally superintended the work of the estate; another was a combination of farm-house and country residence, owned by an absentee landlord who normally lived in the town, visited his villa occasionally for purposes of inspection, and possibly resided in it continuously during the hot summer months; another was a large-scale agricultural factory, built to house a large gang of slaves and managed by a bailiff.³

Though more than forty of them have been uncovered from time to time, various causes have combined to reduce considerably the number of those worthy of study. The excavations have been going on at intervals for more than 150 years, and, partly through the political upheavals which the district of Naples has undergone in that time, partly through failure to realize the importance of publishing results early and adequately, the original reports on the 18th century excavations have been lost and those now available are merely a work of salvage.⁴ At no time, moreover, has it been certain that a villa, once discovered, would be completely excavated. For various reasons (the reluctance of local farmers, the serious handicap of flooding from the river Sarno, and the absence of spectacular finds) an excavation has often been abandoned in its early stages. Or again, the discovery of these villas, which are scattered about the countryside, is quite fortuitous. When, as at Boscoreale in 1895, articles of great intrinsic value are discovered by one land-owner, others are induced to probe their land in the hope of making similar finds and, thus, a momentary fillip is given to this kind of excavation. In general, however, it is haphazard and rarely completed.

The most serious difficulty, however, is presented by our inability to view any longer the remains of the villas: for in nearly every instance they were filled in soon after excavation. The reports, which are thus our sole resource, furnish but meagre information about the materials of which the walls are constructed. At most, all that is forthcoming is a passing reference to the masonry of one or two walls, supplemented, when they occur, by a description of the wall-paintings and their classification under one or other of the well-known Pompeian styles. Obviously wall-painting is not a satisfactory criterion of date, since it may have been renewed in a later style on an old wall. Epigraphy,

³ Rostovtzeff, *op. cit.*, pp. 503-5: Carrington, 'Studies in the Campanian Villae Rusticae', *Journ. Rom. Stud.*, 1931, XXI, 110 ff.

⁴ Ruggiero, *Degli Scavi di Stabia dal 1749 al 1782* (Naples 1881), pls. IX-XIX.

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again, is of little help. The inscriptions which have been discovered are not numerous and, being concerned almost entirely with details of farm-administration, throw no light on the history of the houses.

In the preparation of the present study, two requirements have been sought in every villa deemed worthy of consideration, viz : reasonable completeness in its plan and some evidence of date. In view of all the difficulties which have been recounted, it will cause no surprise that, out of forty or more houses that have been discovered, no more than fourteen have been able to satisfy these two criteria. Those that have survived the test, however, range in date from the 3rd century B.C. to the 1st century A.D. and afford enough evidence for a preliminary survey of the houses of the Vesuvian countryside during those centuries.

Our account will fall into three parts. First, it will be convenient to indicate generally the various architectural types that can be distinguished among the houses ; then, the villas of each type will be examined in chronological order ; and finally, an attempt will be made to indicate the relation in which each type stands to the general economic history of the district and also to the general development of Italian country-houses so far as it can be inferred from ancient literature. Hitherto, as far as the writer is aware, no attempt has been made to classify the ancient country-houses of Italy according to their architectural types, and for that reason it is hoped that a preliminary survey of a single group of them will help towards an understanding of the country-house as a whole.

All the villas of which account will be taken belonged in antiquity to the territory of Pompeii and Stabiae. Some are *villae suburbanae*, since they lie almost at the town-gates and were built, not as farm-houses, but as luxurious residences. The rest lie within a radius of two and a half miles of one or the other of the two towns and are either farm-houses (*villae rusticae*) purely and simply or a combination of farm-house and elegant residence. Both kinds indiscriminately are here referred to as ' villas ', since this useful word denotes, at any rate in its Latin significance, any country-house, whatever its economic rôle. This paper is concerned primarily with differences of structural form, not of economic function, and for that reason the latter will be mentioned only when it is found to affect materially the ground-plan of the houses.

The first of these three types (FIG. 1) into which the ground-plans fall can be seen in an almost ideal form in no. 4. In essentials, it is

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composed of a central farm-yard, normally rectangular in shape, round which the rooms of the villa are grouped. Along one, two or three sides of the cortile runs a covered portico. The entrances are in most cases two in number, placed opposite one another in the two longer sides of the farm-yard and markedly nearer to one end than to the other. The quarters of the owner are situated in the small wing which is cut off by the gates.

In the next kind of villa (FIG. II), of which a typical example is shown in no. 8, this more or less symmetrical farm-yard is replaced by a large cortile surrounded by a colonnade (peristyle). Though at first sight this colonnade seems to bear a close resemblance to the portico of type I, it is distinguished by the following features : (a) it extends round all four sides of the central area, not, as in type I, round three sides at most : (b) the entrance to it (normally there is only one) is placed in an obscure corner of the colonnade to allow the greatest privacy to those inside, whereas the entrances of type I are wide and designed to give easy access : (c) as a consequence of this, the axial planning of the entrances and the construction of the residential portion of the house at one end of the cortile do not occur.

The third type of villa (FIG. 4) is an adaptation for the needs of the countryside of the plan of an ordinary town-house of one or other of the kinds prevalent in Pompeii during the last three centuries before the eruption. It consists of an atrium and, in addition, either an external portico of the type of the ' House of Sallust ' ⁵ or a peristyle.

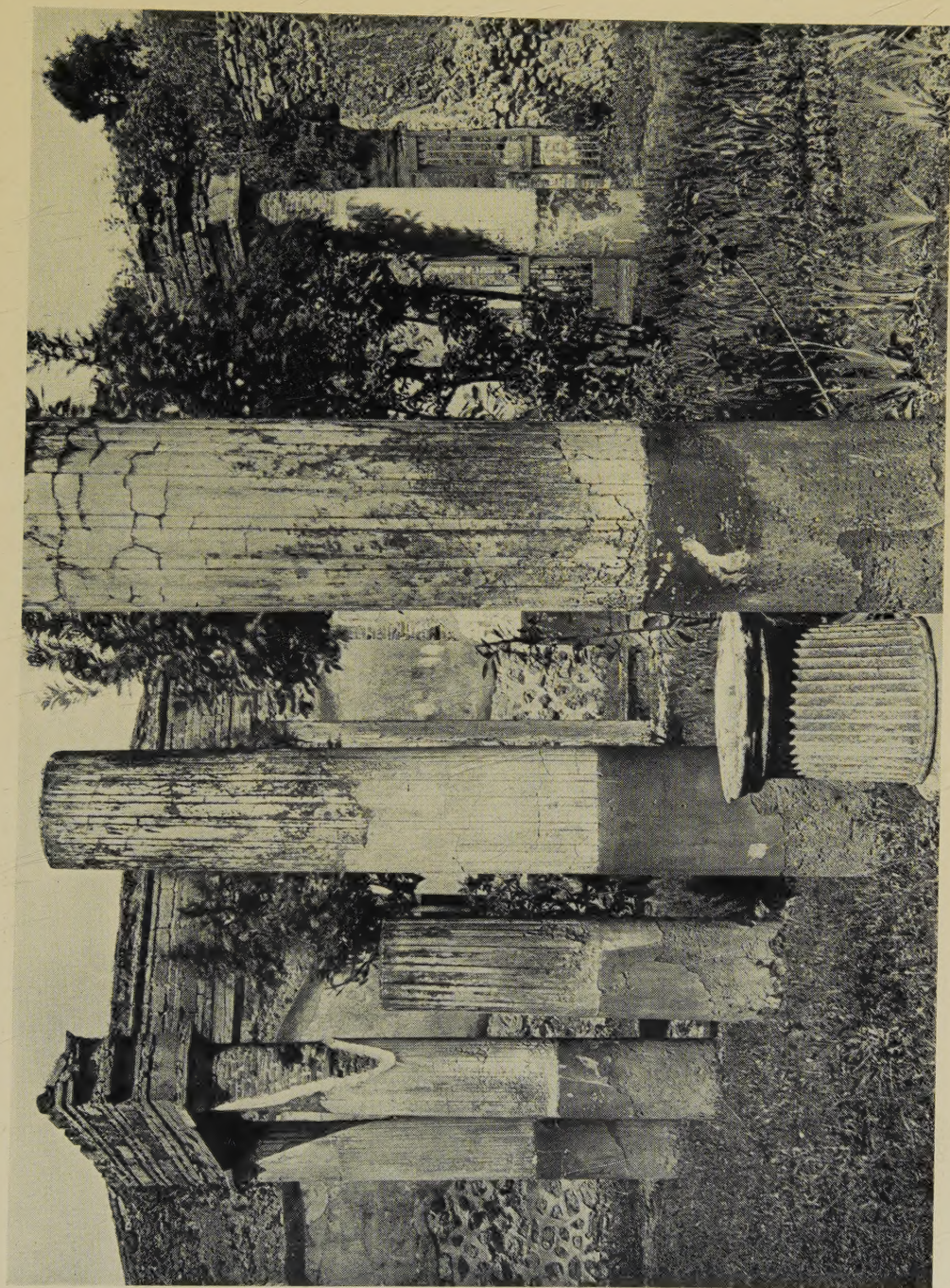
If we examine in detail the fourteen villas that have satisfied our two criteria, we find that seven belong to the first type, four to the second, and three to the third. ⁶

The seven villas of the first type (nos. 1-7) date approximately from the period 200 B.C.-A.D. 79. No. 1 seems to belong to the 2nd century B.C., since the two columns at the east side of the farm-yard (B) as well as two carved sphinxes which adorn the west entrance, are made of the dark grey tufa which is characteristic of Pompeian buildings of this century. Nos. 2 and 4 contain wall-decoration of the second

⁵ ANTIQUITY, June 1933, pp. 137-8 and fig. 1b.

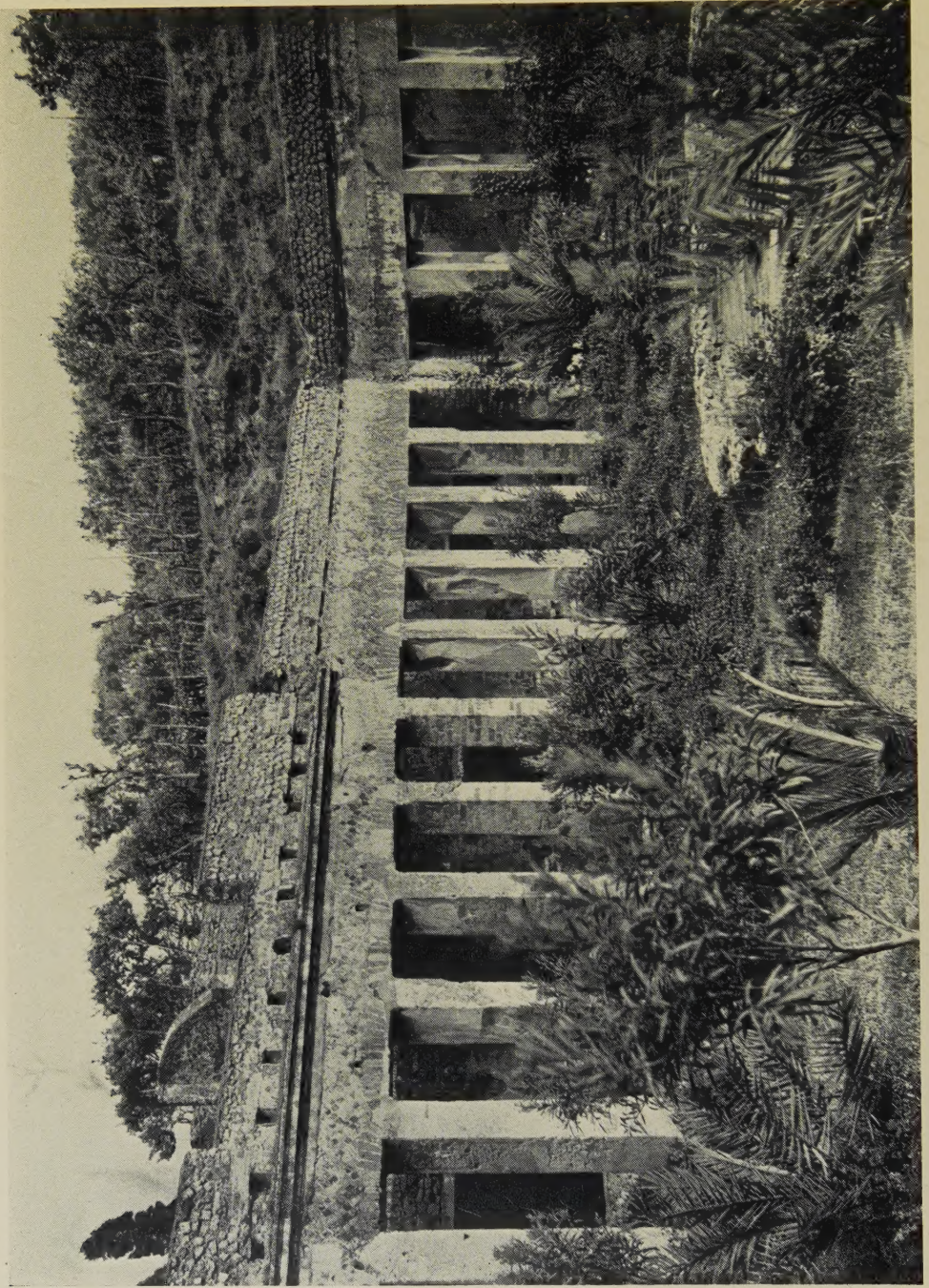
⁶ It would be beyond the scope of this paper to discuss in detail the evidence by which these villas have been dated. Reference may be made to an article by the writer, ' Notes on the Building Materials of Pompeii ', in *Journ. Rom. Stud.*, 1933, pp. 125 ff, where justification will be found for the dates assigned in this paper to the various types of construction.

PLATE I



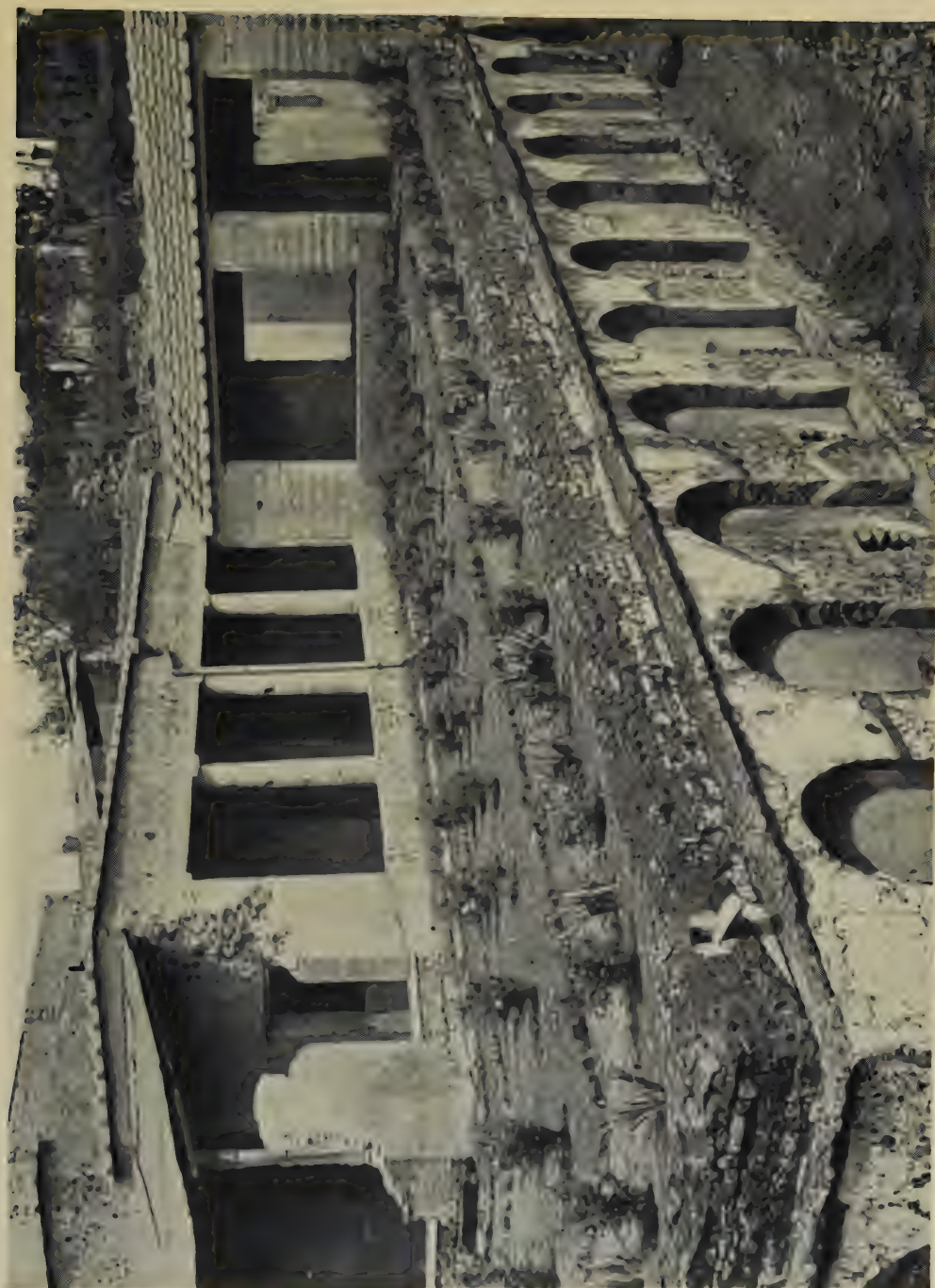
THE 'VILLA OF DIOMEDES', POMPEII, FROM SOUTHWEST. THE FIRST PERISTYLE, WHICH FORMED THE OWNER'S APARTMENT
Plates I-III, *ph.* R. C. Carrington

PLATE II



THE 'VILLA OF DIOMEDES', POMPEII. THE SECOND PERISTYLE, FROM NORTHEAST

PLATE III



THE 'VILLA OF THE MYSTRIES', POMPEII, FROM SOUTHWEST
 In foreground concrete platform with gully behind, external portico of Period I. The rest belongs to Period IV

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Pompeian style, which was in vogue from the early first-century B.C. to the beginning of the Augustan age and, in the lack of further evidence, we may take the first century B.C. as the lower limit of the period of their erection. The remaining villas (nos. 3, 5-7) may be assigned to the first century A.D., since their columns and pilasters are built of brick-faced concrete and their walls are decorated in a late Pompeian style.

A consideration of the plans will make it clear that a farm-yard, in most cases rectangular in shape, is the central feature of all of them, although in a certain number the original form has been obscured either by the incomplete state of the excavations or by structural alterations made subsequently to the period of erection. Thus the exact dimensions of the farm-yard of no. 3 are not known, as the south side was not uncovered; but the existing remains suggest that it continued on a rectangular plan. Or again, in no. 2 the portico originally continued round the north side of the farm-yard, but this northern colonnade, together with the adjoining portion of the cortile, was later remodelled and converted, first into a dining-room and finally into a kitchen. Two of the columns of the original portico were incorporated in the later walls and can be distinguished on the plan. Variations in nos. 1 and 7 were due to other causes. In the former, the cortile departs from the rectangular shape on the west side in order to avoid a public road which ran near. In the latter much of the area of the cortile is taken up by a store-room for wine and oil, but it is no longer clear whether this arrangement was part of the original design or (as the plan seems to suggest) a later alteration.

Turning to the entrances, we see that nos. 1, 3, 4 and 6 have each two gateways arranged in the symmetrical manner already described; the other three have only one. In nos. 2 and 7 this is wide enough for the passage of draught-animals and carts, but too narrow for that purpose in no. 5. A wide gateway was, however, unnecessary in the latter since the west side of the cortile was entirely open. As a final characteristic we may note that in all except no. 1 the rooms used by the owner of the villa formed a compact apartment on that side of the farm-yard which was cut off by the gateways. In nos. 2, 3, and 6, moreover, the branch of the portico which flanks this apartment was so arranged that it could be closed quite easily by shutters and thus kept secluded from the rooms dedicated to the work of the farm and the housing of slaves. In no. 1 the owner's quarter forms a separate apartment on the east side of the cortile with a private doorway into the surrounding fields. Such a special arrangement may have been due to a desire to

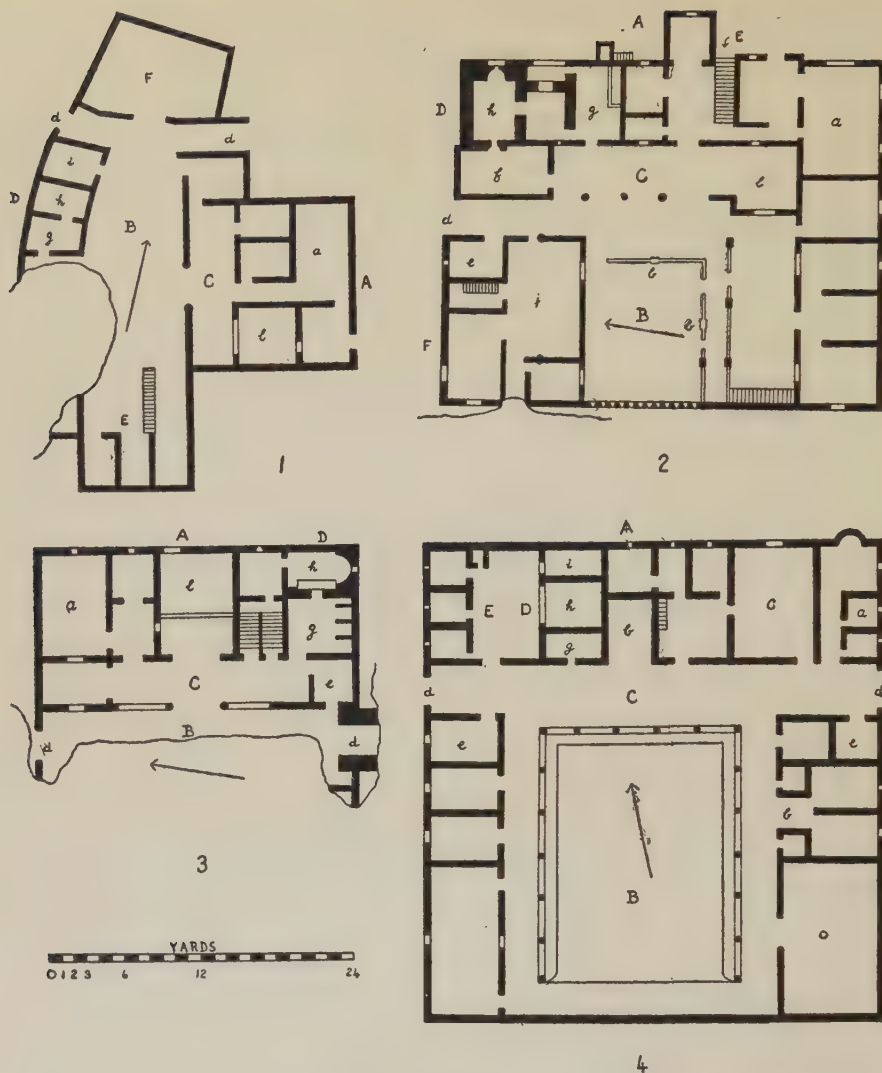
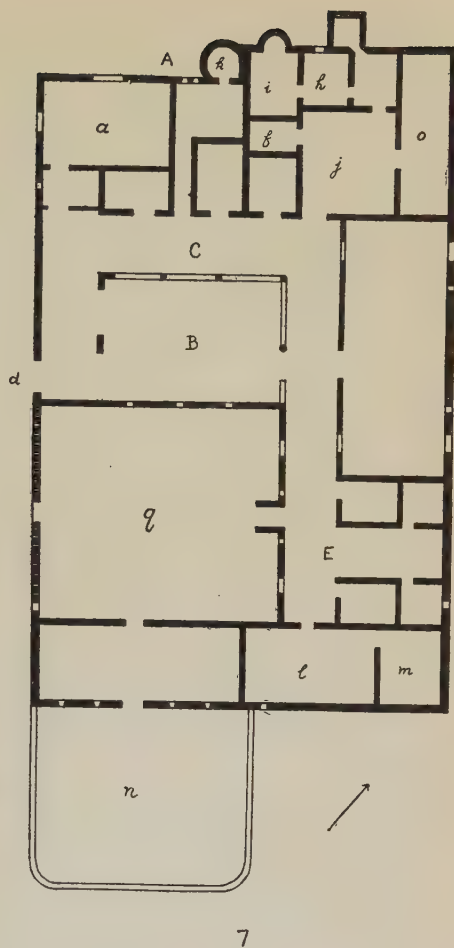


FIG. 1. TYPE I: 'FARM-YARD' VILLAS (nos. 1-7)

A, Owner's Wing
a, dining room
b, domestic altar
c, reception room

B, Farm-yard
d, entrance
e, doorkeeper's room
C, Portico

D, Bath
f, furnace
g, cold room
h, warm room
i, hot room



TYPE I: 'FARM-YARD' VILLAS (nos. 1-7)

E, Slave quarters
F, Work rooms
j, kitchen
k, oven

l, wine, or oil-press
m, olive-crusher
n, threshing floor
o, stable

p, sheep pen
q, wine cellar
r, wine shop

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place these rooms as far as possible from the public road which flanked the villa on the west.

Thus despite some variety of detail and adaptation to special circumstances, it is possible to trace a fundamental unity of design throughout these villas. This underlying unity points to the existence of a recognized type of country-house which was consciously followed by the architects of the district. If we may assume the existence of such a type, further significant points emerge. In the first place, seven out of the fourteen villas under consideration belong to this type, and, as far as we can tell from the published plans, this proportion holds good for all the villas of the neighbourhood. Second, this is the only one out of the three types of villa under review which shows no trace of having been influenced by the plan of the town-house. Third, except for the particular case of the 'Villa of the Mysteries', which will call for special consideration later, this type is older than the other two and occurs throughout the whole period for which our evidence lasts. Finally, the type accords well with the vague references of ancient writers to the lay-out of a farm. Thus, the central farm-yard is assumed all through the writings of Varro, while Cato, in his hotch-potch of requirements, insists that there should be two doors, one of large dimensions, the other according to the taste of the builder. Varro enjoins that either the bailiff (*vilicus*) or the doorkeeper (*ostiarius*) should have a room especially prepared for his use near the entrance of the farm-yard, and, in agreement with this injunction, five out of the seven villas have a room or rooms suitably placed for watching the doors and their approaches. For these reasons it seems legitimate to draw the further conclusion that in villas of this first type we see the Italian country-house in its original and purest form—the rustic counterpart of the urban atrium—which maintained its traditional shape through its inherent suitability to the needs of agriculture and the environment of the countryside.

Whence did this type of house originate? Any answer to this question is necessarily speculative, but light is shed on it if we compare the plan of these villas with the atrium of the town-house, as exemplified in the 'House of the Surgeon' at Pompeii.⁷ The latter, like the former, was an unroofed area, surrounded by rooms. The chief living quarters lay at one end of this area (the *tablinum* and its adjoining rooms). Most significant of all, the two rooms, known as *alae*, which were entirely

⁷ ANTIQUITY, June 1933, pp. 136-7 and fig. 1a.

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open on the side facing the central area, occupy precisely the same position in relation to the whole as the lateral doors of the villas. The difficulty of explaining the *alae* merely as rooms has long been recognized. After prolonged study of the houses of Pompeii, Mau stated that 'A careful study of the remains only deepens the impression that at Pompeii the *alae* served no definite purpose, but were a survival from a previous period, in which they responded to different conditions of life'.⁸ May not the explanation be that in origin the *alae* were the doors of a country-house which was adapted for urban use, and that they were closed, when the adaptation took place, because of the difficulty of having lateral entrances in houses that lined a street?

The hypothesis which the writer would put forward is this: country-houses of the first type and town-houses like the 'House of the Surgeon' are parallel developments from a single source; that source is the prehistoric farm-house whose existence has been postulated to explain the origin of the urban atrium;⁹ the farm-house consisted of two parts, (1) a row of huts, serving as the owner's residence, (2) other huts in front of these, devoted to the work of the farm, the whole being grouped so as to form a hollow square, and the division between the owner's wing and the farm-buildings being marked by lateral entrances. In the countryside, this type of farm-house persisted, with many alterations to meet the demands of growing elegance and luxury, and appears in historical times in villas of type 1. In the town, it was given a more regular shape, probably by the Etruscans, and its lateral entrances which were now inconvenient were closed, though the memory of them survived in the *alae*.¹⁰

Houses of the second type begin a century later than those of type 1, and date either from the first century B.C. or the first century A.D.

⁸ Mau-Kelsey, *Pompeii, Its Life and Art*, 1899, p. 252.

⁹ Patroni, 'L' Origine della Domus', *Rendiconti della Reale Accademia dei Lincei*, 1912, XXI, 260 ff. Cf. *ANTIQUITY*, June 1933, p. 152.

¹⁰ Since this paper was written, Dr Axel Boëthius has published, in the *American Journal of Archaeology*, 1934, XXXVIII, 158 ff, an article entitled, 'Remarks on the Development of Domestic Architecture in Rome'. Amongst other subjects, he reviews carefully and judgmatically the evidence relevant to the early history of the town-house and concludes that there is no clear sign that the atrium was an off-spring of the old Italic huts. His argument depends on negative evidence, *i.e.* on the absence of the vital second link in the chain, huts—farm-house—atrium. The suggestion of the present writer is that the missing link is to be found in the villas of type 1. Since, however, surviving examples of these villas date from a time subsequent to the development of the urban atrium, it is essential to the writer's argument to assume that the type itself was much older.

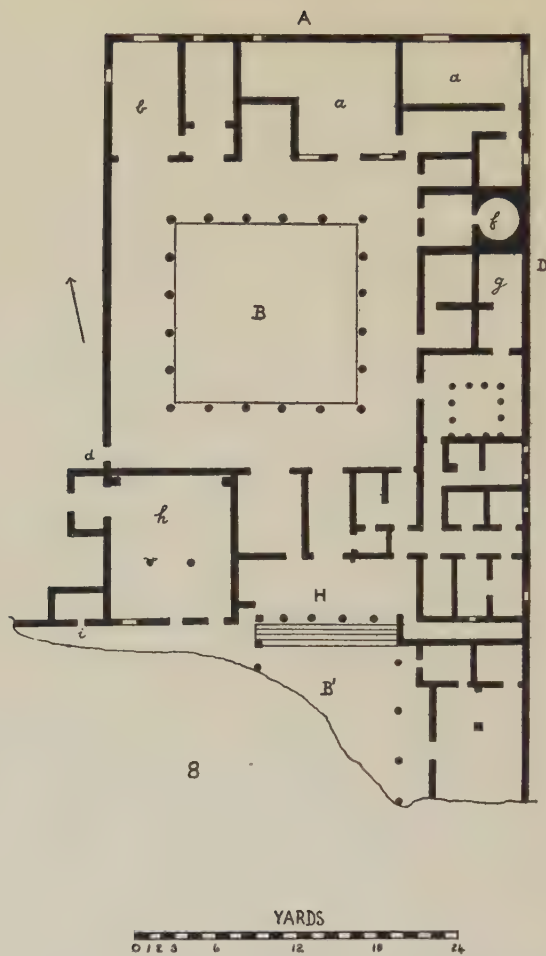


FIG. 2. TYPE II: 'PERISTYLE' VILLAS (NOS. 8-10)

- | | |
|-------------------|----------------------|
| A, Owner's Wing | c, doorkeeper's room |
| a, dining room | d, entrance |
| b, reception room | C, Bakehouse |
| B, B', Peristyles | e, oven |

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The best-known example is the so-called 'Villa of Diomedes' situated in the 'Street of Tombs' to the northwest of Pompeii (PLATES I and II).¹¹ This villa can be dated from details of masonry and wall-decoration to the first half of the first century B.C. For similar reasons no. 8 can be ascribed to the same period, though the brick-faced concrete of the colonnade suggests that its south peristyle (which was only partially excavated) was a reconstruction of the next century. In no. 9 the pilasters and doorposts, being all of brick-faced concrete, suggest a date within the first century A.D. No. 10 contained plentiful wall-decoration of the third style, and, since it appears once to have been the property of Augustus' grandson, Agrippa Posthumus, who died in A.D. 15, belongs at latest to the early years of the present era.

The central feature of them all is a peristyle of the same type as was introduced into the town-house during the second century B.C. (PLATE I).¹² Adjoining this peristyle are unroofed areas, which vary in number, size and shape in different villas. In form the area is either a small cortile (the 'Villa of Diomedes' and no. 9) or a mixture of cortile and peristyle (no. 10), or a (second) complete peristyle (the 'Villa of Diomedes'; PLATE II and no. 8). The means by which the original peristyle expanded, thus, remind us of the remark of Varro, that on a large farm it was convenient to have two 'cohortes', one for the kitchen and tool-sheds, the other for live-stock. Here, however, the purposes were different. The first peristyle of nos. 8 and 10 was occupied by the owner's household, the second by the personnel and implements of the farm. The 'Villa of Diomedes' was a 'villa suburbana', intended purely for residential purposes and devoid of agricultural equipment. The second peristyle (PLATE II) was a cool promenade and had the appearance of a covered, 'all-weather' colonnade of the kind which the Romans called a *cryptoporticus*, since the narrow space between the columns could easily be closed. No. 9 on the other hand, was not a residential villa at all, but a large agricultural factory, run on industrial lines and supervised by a bailiff. Along the west side of the peristyle were rows of cubicles, in which was housed the servile personnel, while the adjoining areas served the purpose of *ergastulum* (slave-prison), bake-house, and cheese-factory. It is

¹¹ Mau-Kelsey, *op. cit.*, pp. 349 ff and fig. 176. A plan of this villa will be found in the stock guide-books to Pompeii, e.g. Engelmann, *New Guide to Pompeii* ed. 2, Leipsig 1931, fig. 62; Maiuri, *Pompeii*, Rome, 1931-2, fig. 14.

¹² ANTIQUITY, June 1933, p. 139 and fig. 1c.

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consonant with the industrial nature of this villa that the stout piers of the peristyle were built to carry a second storey—an example of the same vertical development as can be traced in the late Pompeian urban dwelling where it was called forth by the industrialization of the life of the town.¹³

The third type of villa, inspired directly by the Pompeian town-house, survives in three examples (nos. 11, 12 and 13), of which one dates from the third century B.C., the others from the first century A.D. The earliest of the three (FIG. III) is the so-called 'Villa of the Mysteries', situated two hundred yards to the northwest of the Herculaneum Gate at Pompeii. This villa has been almost completely excavated, and not only has it been recently and fully described in Maiuri's masterly publication,¹⁴ but the buildings are on public view and have become one of the most striking sights of the town. The villa was built in the first place purely as a suburban residence and was not used for agricultural purposes until the last few years before the eruption. The structural changes of the building may be summarized as follows :—

(i) Built during the latter half of the 3rd century B.C., the villa in its original form had an atrium as its central feature, round which the rooms were grouped. On three sides the house was surrounded by a portico of the same general type as is found in the town-house of the same period ('House of Sallust'), differing from it, however, in having a fine prospect over the Bay of Naples (PLATE III).

(ii) A peristyle was added to the original atrium during the second half of the second century B.C., and subsequent modifications tended to make the latter rather than the former the real centre of the house.

(iii) Sometime during the period A.D. 14–63, a large rustic quarter was constructed on the side of the peristyle furthest from the atrium.¹⁵ This must have been intended to house a large number of domestics and possibly agricultural labourers, but there is no sign that any portion of the villa itself was at this time used for agricultural purposes.

(iv) Finally, after the earthquake of A.D. 63, a large triclinium to the northeast of the peristyle was converted into a wine-press (*torcularium*) and a large wine-cellar was attached. Thus this portion of the house became a real agricultural establishment.

¹³ *Ibid.*, p. 143 and fig. 2a.

¹⁴ Maiuri, *La Villa dei Misteri* (Libreria dello Stato, Rome, 1931).

¹⁵ Not shown in fig. III.

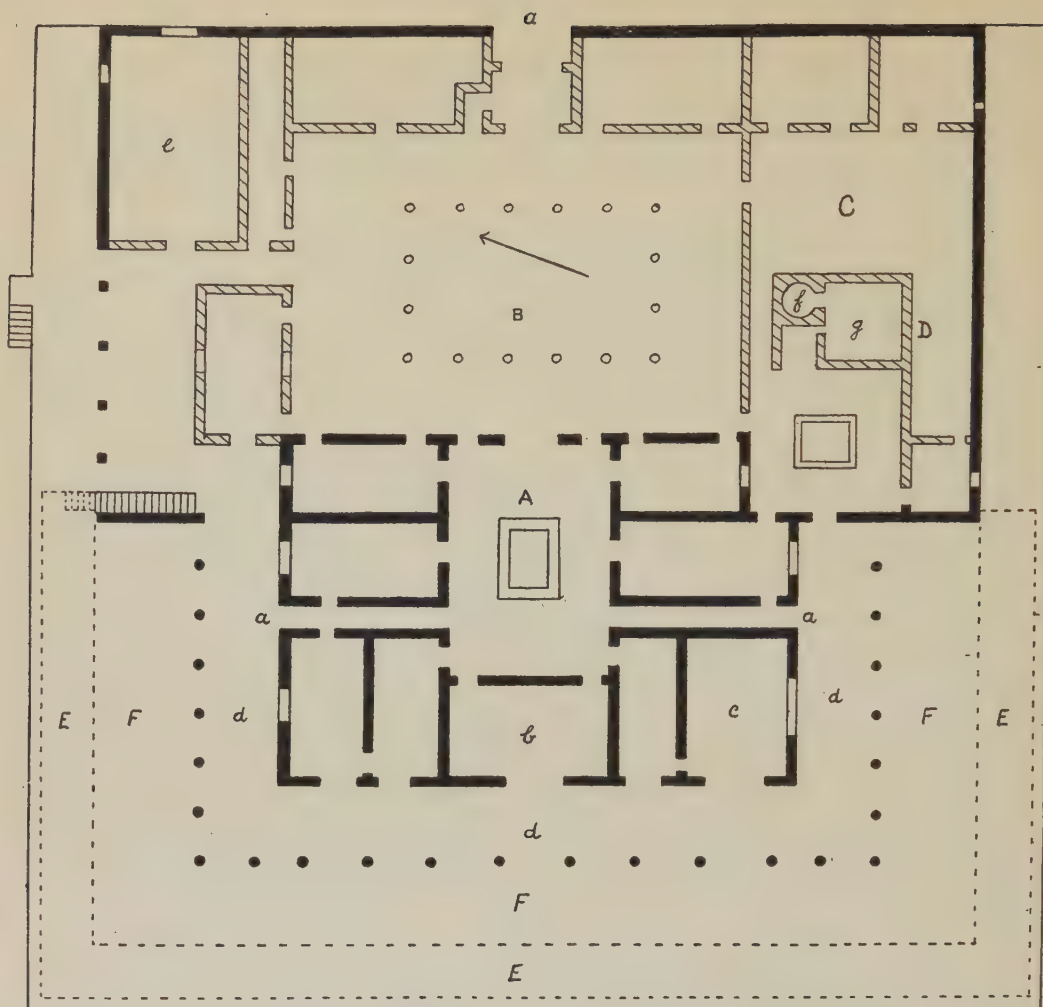


FIG. 3. THE 'VILLA OF THE MYSTERIES', POMPEII (no. 11), PERIOD I, BLACK; PERIOD II, HATCHED

A, Atrium
a, entrance
b, tablinum
c, reception room
d, portico
B, Peristyle
e, dining room

C, Cortile
D, Bath
f, cold room
g, warm room
E, Cryptoporticus
F, Garden

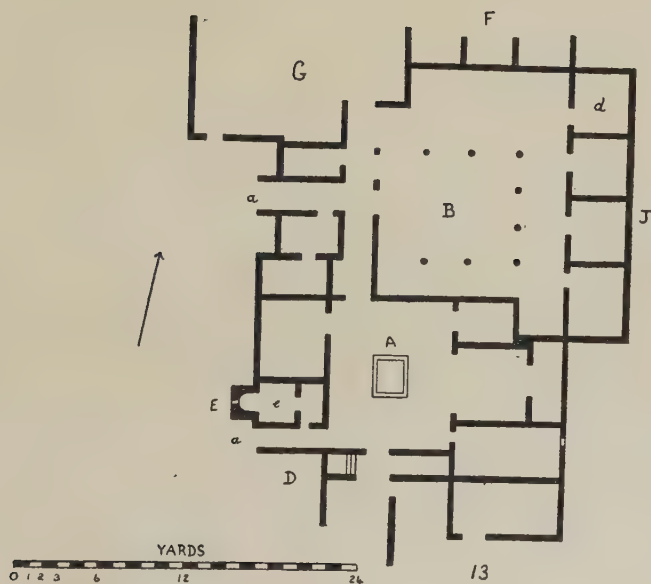


FIG. 4. TYPE III: 'TOWN-HOUSE' VILLAS (nos. 12-13)

- | | | |
|----------------------|-----------------|------------------------|
| a, entrance | C, Cortile | f, hot room |
| A, Atrium | d, kitchen | F, Wine, or oil -press |
| b, doorkeeper's room | D, Owner's Wing | G, Wine, or oil-cellar |
| c, dining room | E, Bath | H, Garden |
| B, Peristyle | e, warm room | J, Slave quarters |

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Only the first of these four periods directly concerns the present study. The villa was erected on a colossal platform of concrete (PLATE II), round which, on all the south and on part of the east and west sides, ran a covered corridor (*cryptoporticus*). The external portico overlooked a garden and was approached directly from the atrium by two corridors which here take the place occupied by the *alae* in the town-house.¹⁶ It is uncertain what sort of buildings at this first period occupied the site of the later peristyle, since the foundations have not been examined. The authorities are reluctant to go deeper, through fear of diminishing the value of the site as an attraction for tourists. It is unlikely, however, in view of the subsequent history of the house, that this area served any agricultural purpose.

Turning to the other two villas (FIG. IV), we find that their history is much less complicated. A date during the first century A.D. is suggested by the occurrence of pilasters and columns of brick-faced concrete. A glance at the plans will make it clear that the two houses show a certain similarity in general arrangement, and that the main divisions of the villas stand in roughly the same relation in both of them. No. 13 contains a Tuscan atrium, less regular in the arrangement of its rooms than the town-house. It shows no trace of the traditional *alae* or *tablinum*. The main entrance lies, not, as in the town-house, on its central axis, but in one corner, and is flanked by a small bathing-establishment—a feature which was either entirely lacking in a town house or was placed out of sight of the main door.

The atrium of no. 12, no less irregular than no. 13 in the arrangement of its rooms, reflects in its piers and columns the new developments which the town atrium was undergoing in the last decades before the eruption.¹⁷ A second-storey gallery surrounded the impluvium, supported by stout piers at the corners and intermediate columns on the two longer sides. The area of the impluvium is so large that it resembles a small cortile, a feature which can be paralleled in several late Pompeian houses and, at a later date, in the 'House of the Round Temple' at Ostia. The close interaction between the domestic architecture of town and country is nowhere seen more clearly than in this development of the impluvium.

¹⁶ It is significant for the view taken in this paper about the origin of the atrium that, in this instance, when the atrium-plan was used, not in the town but in the suburbs, the *alae* became doorways leading out of the central area.

¹⁷ ANTIQUITY, *loc. cit.*

SOME ANCIENT ITALIAN COUNTRY-HOUSES

Although for the purposes of classification, these three villas have been grouped together, an important distinction ought to be drawn between the 'Villa of the Mysteries' and the other two. The former, as we have seen, was situated close to the walls of Pompeii, and was not in origin designed as a farm-house. In plan it was almost a replica of the urban 'House of Sallust' and such variations as there are can easily be explained by the difference of site. The other two villas, on the contrary, were real farm-houses, situated in the open country. No. 13 lay across the river Sarno, $1\frac{1}{2}$ miles to the southeast of Pompeii, while no. 12 was in the present-day commune of Gragnano, $1\frac{1}{2}$ miles to the east of the ancient Stabiae. Their architects, far from blindly reproducing the urban plan, adapted its traditional form to the needs of a new environment. They evolved a 'rusticised' edition of the town-house, in contrast to the 'Villa of the Mysteries' which is a town-house pure and simple, its suburban situation being merely accidental. This is an important distinction, for it enables us to understand why, after a single example in the third century B.C., there is a gap of two centuries before villas of the third type occur again. The Samnite highlanders, who invaded the plain of Campania at the end of the fourth century B.C., quickly settled down, absorbed the Hellenistic culture of which Naples was a strong centre, and became a local aristocracy. Their position at Pompeii is well-attested and it is amongst their number that the builders of the palatial residences of the third and second centuries B.C. are to be sought. If we assume the first owner of the 'Villa of the Mysteries' to have been a member of this conquering aristocracy, the combination of wealth and culture which is seen in the villa¹ is readily comprehensible. We cannot conclude, however, that such a house was a regular feature of Italian suburbs at this early date. It is unbelievable that a similar dwelling could be paralleled at the time even on the outskirts of Rome itself. The 'Villa of the Mysteries' is a flash in the pan. In general, the third type of villa belongs to a late period in the development of the country-house.

From the chronological details which have been given, the history of the various types may be summarized as follows:—

<i>Date</i>					<i>Types</i>
3rd century	B.C.	—	—	—	III
2nd	" "	—	—	—	I
1st	" "	—	—	—	I, II
1st	" A.D.	—	—	—	I, II, III

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It is obvious that any conclusions which we attempt to draw from the results summarized in this table will be based to some extent on negative evidence, *i.e.* on the non-occurrence of a given type of villa in a given century. Such non-occurrence may be purely accidental. This defect, however, will be partially discounted, if the conclusions which we draw are not only mutually coherent but also in harmony with the external evidence of literature. When the evidence is so scanty, reasonable coherence is all that can be expected.

If then we pass over as a 'flash in the pan' the single villa of type III which occurs in the 3rd century, the remainder present us with a simple and continuous development. Starting with type I in the 2nd century B.C., type II appears alongside it a century later, and type III alongside both of them in the 1st century A.D. A question immediately arises. If, as has been suggested, the first type represents the traditional pattern of a country-house, still uninfluenced by urban developments, why is it not found earlier than the 2nd century B.C.? An answer may be sought in the general history of the district. We gather from Livy that, at the end of the 3rd century B.C., the region of Vesuvius was the scene of considerable warfare between the armies of Hannibal and of Rome.¹⁸ Pompeii's neighbour, Nuceria, suffered in a special degree at Hannibal's hands, and Pompeii, which remained faithful to Rome, cannot have been unscathed. Though the city itself had been newly fortified for the occasion,¹⁹ an easy prey was offered by the outlying farms, whence the inhabitants must have fled on the approach of the hostile army. The absence of buildings in the countryside earlier than the time of Hannibal may be due simply to the destruction wrought by the invader. On the other hand, the 'Villa of the Mysteries' escaped destruction, lying close to the town-walls and being constructed on a solid platform which could not lightly be destroyed. In this fertile district, however, the damage done by Hannibal cannot have remained long unrepaired. Villas sprang up in the next century to replace those which he destroyed, and of these at least one has been discovered.

If we assume that no. I was not an isolated example of villas of type I in this century and that the type as a whole may be considered typical of the period, a comparison is invited with the writings of Cato (234-147 B.C.), whose treatise, *De Agri Cultura*, reflects the state of Italian

¹⁸ XXIII, *passim*, esp. ch. 15.

¹⁹ ANTIQUITY, March 1932, p. 7, fig. 1, period III.

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agriculture during the first half of the 2nd century. Unfortunately, except for his remark about the number and dimensions of the doors, Cato says nothing about the plan of a farm-house. He does however give some indication of the size of the estate attached to it, and although he does not quote general statistics, he incidentally refers to farms of 100 (twice), 120, and 240 jugera.²⁰ These figures agree well with the evidence of the villas. In no. 7 the wine and oil vats have been preserved intact, and it has proved possible to form a rough estimate of the amount of produce which was grown each year and hence of the probable size of the estate.²¹ The land attached to this villa seems to have been about 100 jugera in extent. A comparison of the storage-room of other villas with that of no. 7 suggests that 100 jugera represented an average acreage, though the smallest estate can only have been half this size and the largest may have been double. These figures thus accord well with those of Cato.

Varro,²² writing at the end of the republican age, makes one of the personages who appear in his treatise lament a tendency which had grown up in his day to attach more importance to the residential than to the agricultural portion of the country-house. He contrasts the luxury of the moderns, whose only care is to have 'villam urbanam quam maximam ac politissimam', with the simplicity of the ancients whose first thought was how to develop an efficient agriculture. This tendency is reflected in the villas of type II, which appear for the first time during Varro's lifetime. The owners of such villas as nos. 8 and 10 were really townsfolk who used them for summer residences and left the management of the estates in the hands of bailiffs. Hence it was not unnatural, when the tendency towards luxury began, that they should transfer the peristyle into the country—the newest and most luxurious feature that the town-house then possessed. The vague resemblance of the peristyle to the rustic cortile may have suggested its suitability for a country-house and may explain why the peristyle was taken over before the atrium. Once acclimatized, however, it quickly showed its suitability for agricultural purposes and in the next century is found housing an agricultural factory, a purely industrial building with no trace whatever of a residential apartment.

The peace established by Augustus throughout Italy, which freed

²⁰ *De Agri Cultura*, chs. 1, 3, 10 and 11.

²¹ Day, in *Yale Classical Studies*, 1932, III, 165 ff.

²² II, 13, 6.

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the countryside from the terror of brigandage and civil war, led to a growing desire on the part of the townsman to possess in his country villa all the amenities of a city dwelling. Such a desire, which is reflected in several of the poems of Horace, led in the region of Vesuvius to further influence of the town upon the country. The last architectural feature to be transferred was the atrium itself, the time-honoured centre of the urban dwelling, whose plan it had dominated for centuries. When taken into the country, however, the atrium lost several of its traditional features (*e.g.* *alae*, *tablinum*) and in general assumed a freer style in harmony with its new surroundings. Thus, if the hypothesis put forward on an earlier page is well founded, the atrium, after originating in the country and being imported into the town, and after enjoying several centuries of urban life, was transplanted back into the country, when its rustic origin was already forgotten, and, in the process, assumed something of the irregularity which had characterized it in prehistoric days. The buildings devoted to the work of the farm now grew up round the nucleus formed by the peristyle and atrium. These buildings, being capable of indefinite extension, opened the way for a conglomeration of apartments of the kind found in Pliny's Laurentine villa: for, though the precise plan of that villa is uncertain, an atrium seems certainly to have been an important feature of it, round the atrium being grouped the *cavaedium*, *triclinia*, *turris*, *sphaeristerium* and other rooms, whose exact shapes have taxed the ingenuity of modern students. Such grandiose developments helped to make the elegant townsman feel that among them he had a town's amenities in miniature, and, as such, formed a natural development of the Campanian villa of type III. In their architectural forms, however, they were the outcome of a taste which was cosmopolitan rather than Italian and, for that reason, are beyond the scope of the present study.

Santa Orosia : a Thaumaturgic Saint

by VIOLET ALFORD

WINDY Jaca, up on its terrace, its back to the snowy Colorado, is especially connected with that disastrous forerunner of the Spanish revolution, which coming to premature birth ended in premature death. We may see there the Street of the Martyrs, re-named by a Republic, born after all without bloodshed, in memory of its first blood sacrifice. Yet in spite of its rather red modernity, little Jaca still cherishes rags and tatters of tradition, and up there on its chilly height a local thaumaturgical goddess holds as much sway as she would in Andalusia. On the 25th of June the town celebrates its feast in honour of Santa Orosia. That is the moment to see the old Jaca behaving as it did before its seventeen towers came down, and its encircling walls were laid flat.

Santa Orosia was, when her head was on her shoulders, a Czech—probably Moravian, since Moravia is famous for its zeal—missionary lady. She came to the Aragon wilds some time in the eighth century, seeking to convert—I was about to write ‘the people of Aragon’. But here begins the dark confusion of the tale. For the people of Aragon had long since nominally embraced Christianity—did not St. James evangelize Spain, crowning his work at famous Santiago de Compostella? In fact the Tarraconense province, which included Aragon, was converted as early as the middle of the third century, while by the fourth the Church was so well established that we read of twelve bishops figuring at the Council of Elvira. Had the missionary lady, in far-off Moravia, heard of the Moorish infidels, and taken her long journey to devote herself to these terrors of Europe, just as their northern tide was at the flood? The scene of her story was never under Moorish domination however, for the Reconquista began on the heights of Jaca at the same time as on the almost untouched Cantabrian coast, that is to say with the appearance of the first Moor. And it was organized by the same race, for Jaca was once Iacca, its early Counts were Aznars, unmistakable signs, together with a thousand Euskarian place-names—Benabarre, Lagunarrota, Belarra, Ibars—of the Basque people. This Euskarian influence stretches from Catalonia to the Asturias, and on

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both sides of the chain, and this is one reason to suppose the missionary lady, did after all, find work ; for the Basques were renowned laggards in the faith, as they are famous traditionalists today. Officially they may have been evangelized, but in all likelihood it took more than St. James and the twelve bishops to break down their old religion. Their brothers round Bayonne were the very last of the Novempopulanae to accept the Cross, and that not before they had chopped off the head of Saint Léon as late as the tenth century. So it is not surprising to read Hergbaldus, who about 600 A.D. writes 'the Vascons were given to adoring demons',¹ nor to find that even into the eleventh century the decapitation of Sainte Foi d'Agen was remembered against 'Tota Basconn' et Aragons'.² I am therefore quite ready to believe that if the Lady Orosia ever came interfering with Basque moon-gods and such like, their devotees put her out of the way as they had many another. But the legend distinctly says she was done to death by Moors. These sons of the Prophet chased her up the mountain behind Yebra de Basa, seeking to violate her virginity—another tale says she was on her way to marry a prince—but contented themselves with killing her on the top. Then occurred the supernatural direction of a shepherd, an integral part of most stories of miracle-working madonnas and saints. This one was guided to where the body lay, its severed head some distance away. Unflinching he found that too, and carrying out heaven-sent orders, took the body to Jaca, retaining the head at his own village of Yebra. There they are to this day. And on the 25th of June the bishop of the diocese comes up with his chaplains, in a train with about six hundred people where there are seats for three hundred, and amongst them are the *endemoniados*, coming to be dispossessed of their devils by the wonder-working saint. They go to the body to be cured if they live on the west of the Gallego river, to the head if to the east. And pilgrims and parish crosses follow the same rule.

About 4 o'clock in the afternoon the *Romeria* arrives, some walking as much as 37 kilometres and more. They are met by the ceremonial dancers of Jaca, who perform their *Paleotada*, a stick dance, before them into the town. A poor and dirty little *Romeria* it is. The pilgrims wear the same ancient cloaks their fathers wore before them. Unspeakable hats, spotted with grease and weather, hang down their backs, heavy staves are in their hands, marked with a double cross. The

¹ P. S. Ormond, *The Basques and their Country* (Simpkin, Marshall, 1926).

² Rodney Gallop, *A Book of the Basques* (Macmillan, 1930).

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dancers make a fine contrast. They wear the gala dress of Alto Aragon, white under-breeches puffing below slit up top-breeches. Their white 'morris' shirts are bedecked with scarves, their musician marches ahead, thwacking his long, wooden, stringed drum, piping his three-holed pipe. These somewhat archaic instruments are used on both sides of the Pyrenees, notably in the Val d'Ossau and in the Basque Soule. Here, on this southern slope, the drum is known as the *chicotén*. An old, heavy, iron key is used for tuning the six strings, while the pipe shows a covering of snake skin which prevents the joints parting. Some enterprising hand has carved upon it Año 1402. This year modernism overrode traditionalism, and the dancers refused to come out. Their musician, terribly disappointed at losing his yearly moment of glory, went off on foot to join the musician of the head, at Yebra. Their defaulting might have been simple reluctance to appear in an ecclesiastical procession, not knowing whether Madrid had sanctioned it or no. For the Republic has forbidden all church processions, and up to the last minute we did not know what would happen next morning. But the town was determined to keep its feast in spite of mandates from Madrid. When darkness fell the band of the regiment at Jaca paraded the streets accompanied by the *Cabezudos*. These 'great heads' of papier mâché, running terrifyingly before, represent red-nosed men, comic old women, and of course, Moors. They are so Spanish in taste that they need to be seen, and then they are seldom appreciated—witness the puzzled reception of Falla's 'Puppet Show' when, in the Paris Opéra, Don Quixote, in contradistinction to the life-sized puppets, was actually represented as a *Cabezudo*.³ When the military had played themselves home, the *ronda de la villa* began. A bough-bedecked lorry carrying guitarists and the singer made its rounds, stopping under the windows of the mayor and other notables, including those of the foreign visitors. It will be difficult to forget the sudden burst of guitar music which set vibrating the chill air of 2 o'clock in the morning, and the rise of the tight tenor voice, forcing out the complications of a Jota. For these are what he sang, improvising verses suitable to those he serenaded, the guitars, with extraordinary gusto, ushering in each verse with a few stereotyped bars. Peeping between the blind slats one could see the musicians, white clad, sitting amongst the greenery of their moving platform. And even at that hour a small crowd gathered to listen.

³ J. B. Trend, *Manuel de Falla and Spanish Music* (Knopf, New York, 1929).

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A few years ago the *endemoniados* spent the night in vigil in the Cathedral. One can imagine, having seen samples of these unfortunates, what scenes must have been thus engendered, and presently modernism did, to some extent, exert itself, and the vigil has been suppressed. One sees them first issuing from the Cathedral on the morning of the great day, and a sorry sight it is. In a tight bunch of neurotic misery they creep, bent double, beneath the frame on which the reliquary is carried. A memory of poor, tortured faces and of a pallid, epileptic looking little boy, remains. To set against these is a picture of the parochial crosses, carried by the queerest old rustics of sacristans imaginable. And not only carried, but fought with, for quarrels break out, and in honour of his parish bearers are only too pleased to use them as battle-poles. An odd fighting company they are. Some wear the dress of the region, displaying under a ragged cassock the puffing breeches ; nearly all march in *alpargatas*, the coloured ties stretched in handfuls so it seems, from toe-piece to heel-piece, whence they rise, cross-gartered, up the leg. Some make their pilgrimage in leather *abarcas*, a primitive footgear probably descended from Iberian costume. They consist of a leather sole, a small toe-piece attached by metal links, and instead of ties, leather thongs wind up the leg over handknitted white socks, *pedaletas* ; another link connects the heel with the thong.

The procession stops from time to time to allow a countryman to reach up and touch the reliquary with his hat, or for a child to be lifted to kiss it. The bearers are as obliging as those of the Seville Pasos, when the humblest may command a halt while they sing a Saeta to their favourite Virgin. At last, however, it reaches the open space on which has been built the horrible modern *Templete*. Santa Orosia, the bishop and clergy, all mount to the balcony under which the crowd surges, not to view their saint, it seemed to me, but to stare at what the miracle seekers might do. Two priests opened the reliquary ; with well-timed movements like waiters folding tablecloths, they lifted out covering after covering. These are of velvet or brocade, lavishly embroidered by devotees, and as the pile increased a few faint whimpers came from down below. This is what the crowd had been waiting for. ' *Ahora* ', they said. ' *Principian*, they are beginning '. When the tenth brocade was lifted one voice had gained the ascendancy. A long, thin wail arose. ' Ai, ai, Santa Orosia ' ! When the fifteenth was displayed—' Santa Orosia ! Santa Orosia —a—a-a ! ' a series of staccato screams, forced out in the most determinedly hysterical fashion

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imaginable. The owner of the voice seemed to be urging herself on. 'Now it's time to begin. Now I will make her (and them) pay attention to me'. At the twentieth brocade horrible screams were echoing against the Temple, at the twenty-fifth the crowd was surging forward to get a look at the annual miracle. '*Insultos*', said they with satisfaction, for now the voice was hurling foul epithets at the saint whose help was sought. At the thirtieth brocade the whole place was ringing with hysterical shrieks; children had burst into frightened wails of their own, the pilgrims, who order the procession, were fighting to keep a space about the miracle recipient. 'She is tearing off her clothes' said the crowd with complacency.

Then came the last brocade, and the bishop stepped to the front. 'Kneel, please kneel', whispered a friendly girl, fearful lest the foreigner should be guilty of irreverence. But while the heretic duly knelt, the vast majority stood upon its feet, with all the demeanour of a cinema crowd, coolly gazing at the object held aloft by the bishop. What was it up there, stiffly advanced, motionless under the scorching sun? A mummified cat would perhaps describe its general appearance, bound about with ancient ribbons, slung with medals, brown, dessicated, repulsive in the extreme. And as the immovable exposure continued, more hateful every minute, another adjective may be added—preposterous. No wonder the Republic, seeking to educate the people, finds itself at every turn at variance with the Church. And since the last elections, who will dare continue the education?

The voice rose to piercing heights. 'Santa Orosia! Santa Orosia! Santa Orosia!' as automatically as a metronome, and thus went on until the guardians held the perpetrator writhing on the ground. This miserable woman had shrieked for twenty minutes from first to last, and the cinema crowd, wearying of the picture, began conversations, laughed, spat, and pushed, before the poor little remains of whatever it was up there, were reburied beneath the hundred brocades.

High on the mountain next day another wind was blowing. Yebra keeps the feast on the 25th on the plateau above, and on the 26th in the village. Fresh air and an arduous climb put a different complexion on the proceedings. The parish priest steps out courageously, the small reliquary containing the head of the saint, borne by mountain stalwarts. A separate confraternity from that of Jaca comes in, parish crosses are not missing, but above all the dancers decorate the procession. Very early they all string out into single file on the winding

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path, and begin the long, rough climb to the Sanctuary. The dancers are spotlessly clean in their regional costume, over which are worn the sashes, ribbons, the scarves and bells which turn them into members of the great European ritual brotherhood. Their hats have tall sprays of flowers, the leader flashes a mirror on his, while a cloud of ribbons floats down his back—a costume recalling both Basque *Volantak*, dancing in the snow, and Bampton Morris processing down the Oxford highroad. The bell-pads upon the Yebra legs are of the same pattern as those on Yorkshire, Czech, Basque or Catalan legs, their feet are in *alpargatas* of the Aragonese style. They hold a stick in either hand, before them marches their musician, with his stringed drum and three-holed pipe. With him went, last time, his dethroned brother of Jaca. But I fancy he was not allowed to play. Where the pathway is broad enough they dance, but more often a single file is all they can manage, until they all fan out on the great upland which is their goal. There at the Sanctuary Señor Cura opens the reliquary, and displays the sometime head. The *Romeria* stays up there all day, to eat and drink, to sing and dance. Girls spread clean napkins on the turf, out come wine-bottles and leathern wine-sacks, from which the men pour red jets down their parched throats. If banner or cross bearers have a private difference, here is plenty of room to fight it out, flag-poles and crosses clashing like the croziers of the old fighting bishops. But it is all good fun, which, when they have let a little blood, ends in refreshments. The ritual dancers get lost in the crowd, where casting off their hierophancy, they make love, sing Jotas, and with difficulty are collected to process downwards.

Before they leave the plateau silent and bare for another long year, we must examine the little Sanctuario. It is a tiny chapel, roughly built of stones. Under the peak of the roof is a niche for a figure of the saint. At the back grows a sacred blackberry, forever green. The chapel is raised on a great boulder cropping out of the turf, and on the boulder are two cup-shaped depressions, almost side by side. These are the *arrodillas*, the knee-marks of the shepherd who found the decapitated body. Here he knelt while receiving instructions as to what he was to do with it. And here, if anywhere, we find an indication as to what may be the foundation of the whole affair.

It is evident that a female deity, whose shrines were rocks, stones, and stony mountain tops, was honoured all along the chain, on both sides. The French Aude, Ariège, Bigorre and Béarn are full of sacred stones and stone legends. The Basque provinces teem with Virgins

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of the Rock, and Ladies of the Cavern, now confused with modern witches. In the Vallée d'Aspe, up which the Roman, and far older than Roman, road ran through Iacca from Gaul to Spain, is a stone visited by barren women. In the same valley pilgrimages are made to the black Virgin of Sarrance, a nearly formless stone, to which a head and a hand have been lately added. She was discovered by a yoke of oxen. The beasts persisted in kneeling in the river, do what their driver would. On investigating, the astonished man descried the black Virgin under the water. It is supposed that the stone really is a pre-Christian image, perhaps the female deity now under discussion, thrown long ages since into the Gave, by zealous missionaries or their converts. Or again, not so many ages ago, by some scandalized curé. A most remarkable example of continuity of ritual is, or was, the Shrove Tuesday procession of young men round the great *Cailhou* of Arribapardin, in the Luchon district. They lit a fire on the 'Pebble', and in single file danced round it in such attitude and undress that 'la fête blesse trop la décence pour être décrite dans tous les détails'. These stones, so obviously devoted to an ancient fertility-cult, are situated exactly back to back with the mountain of Santa Orosia's knee-marked boulder. So it is not drawing too long a bow to deduce a cult, here also, dedicated to a thaumaturgic Lady of the Rock, herself a Pyrenean descendant of the great earth-mother, who was not only enshrined in, but symbolized by, stones, rocks, cones and pillars. The knee-marks may be natural, but are also quite likely to be man, or rather woman-made depressions to hold offerings to the giver of fecundity. Offerings are still laid on rocks, or under cromlechs, in many countries which have not even yet forgotten. The insults and threats by the 'possessed' are quite in order. Threatening the giver of plenty is one way of obtaining your wish. Sir James Frazer tells of a Japanese godling who withheld rain. His people just hurled him into a ricefield, to lie under the brazen sun till he came to his senses and did his duty. Nor need one go to Japan to witness human desires opposed to the dumbness of a divinity. The fishermen of Lequeitio beat their statue of Saint Peter and cast him into the sea, while the people of Nestier with menaces threw their saint into the Garonne, thereby impressing their need of fish and rain upon contumacious givers of these commodities. It seems probable that the Virgin of the Pillar, the great Patroness of Zaragoza, superseded an earth-mother, symbolized by a pillar. The Virgin came up out of the earth already on her pillar, and has been venerated *desde tiempo inmemorial*, and from time immemorial also

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milagros estupendos have occurred there. The confusion between witches and Ladies of the Rock is particularly apposite, for if witches inherited from the great mother's priestesses, their pitiful survivors of today inherit likewise, and what looks like confusion, is in reality a direct connexion. Even the evergreen blackberry is in its proper place. Bushes near sacred stones become imbued with sanctity themselves. The next day, down in the village, the fiesta continues. The *Romeros* and parish crosses go home early, so the villagers have it all to themselves except for two inquisitive *Inglesas*, who are welcomed with all the gracious hospitality of the Spaniard, and even blessed by the oldest inhabitant, clad in full, though excessively dirty, Aragon costume, and shod with Iberian *abarcas*. The 'young men's mass' had not finished when the *ronda de la villa*, twanging sonorous guitars, came to the church porch. They consist of *bandurrias*—the metal stringed treble guitar—guitars, untraditional violins, and the singer. This last is a youth, who sings Jotas, improvises verses suitable to the house outside which he performs, and who forces out a tenor voice in true Jota style, making a sympathetic throat ache. When the priest and the mayor had had their *albada*, the company went to the tiny school, the girls of the village were fetched, and a public 'ball' began. It was enlivened with much red wine, a great deal of dust was stirred—not, alas, by Jotas, but by soul-deadening two-steps. But for the stick dancers' ribbons one might have been at Balham—or Berlin. A deathlike silence fell upon little Yebra when the scuffling ceased.

It was not till late afternoon that the results of whole roast sucking lambs, *migas* and red wine, allowed the feasters to re-appear. Then tinkling bells and fluttering ribbons called to the tiny plaza managed on the top of an outcrop of rock. This is the only flat, or flattish place in the village. Here the stick dancers danced, till long shadows danced with them, and everyone came out to hear the *pastorada*. The leader, the *Mayoral*, called after the chief of the sheep breeding and pasturing communal arrangements, and the *Rabadan*, the chief shepherd, stand at either end of the face-to-face files. The Mayoral 'dedicates' each figure to some village personage, seizing the occasion to sharpen his wits upon his subject. His dancers say proudly 'He do serve we out', but no one takes it amiss. For a brief space the Mayoral, often, like so many folk leaderships in inherited office, is the king, critic and judge of his village. He may say what he chooses. Meanwhile the little Rabadan, aged eight, runs after the girls, clubs the dancers into position, and generally behaves like an English Morris Fool, while the musician,

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burdened by his immense stringed drum (in this village called the *salterio*) prefers to sit piping, the drum resting on the ground.

The dance has many figures, each beginning with an 'up-the-middle' in pairs, and a 'cast-off' at the top. The figures are merely varieties in the manner of tapping sticks ; each is named ; La Procession Cruzada, La Niña, and other much ruder appellations. When the midsummer sun at last sets, the *pastorada* proper begins, eagerly looked forward to for months, a review of village happenings during the year. The little Rabadan 'speaks his piece' faultlessly, under his family's admiring gaze, and the Mayoral steps forward, mirror flashing, flourishing his be-ribboned staff. Beginning with a set opening, like a Jota song, he is soon improvising verse, relating the ups and downs of the wool trade, the rigours of the lambing season, for although he is but a mock Mayoral, sheep are the riches and life of the community. Village scandals, out-of-the-way happenings—and how few they are—returns or departures of fortune-seeking *Americanos*—nothing is forgotten. Finally the most important subject of all is recited, the behaviour of the weather. In one *pastorada* I know this is of such intense interest, that on the first day of the fiesta the Mayoral comments on the weather from October to March, the feast falling in October, ending his detailed remarks with

Mañana, Dios mediante,
Esplicaré el otro tiempo.

and the following day explains March to October. In many places each dancer says a *dicho*, the whole thing then becoming extraordinarily like the mummers' and sword dancers' plays of England. Their manner of introducing themselves, for one thing, is identical.

In comes I, old Belzebub,
And in my hand I carries my club,
announces a Gloucestershire lad about Christmas time.

Aqui sale Belcebú,
a vuestras plantas postrado,
declaims one from Huesca province.

Which likeness, just indicated here, both ends the *pastorada* and brings us back to the old rite, kept in memory still by Winter Solstice plays, by Spring or Summer Solstice dances, every one of them more or less true to type, stretching across the whole continent of Europe from Piedmont to Shetland, from Bulgaria to the Gallician coast.

It would be surprising if the midsummer cult at thaumaturgic Orosia's rock sanctuary were a thing apart.

The Topography of Saxon London

by R. E. M. WHEELER

IN this note on Saxon London I am not concerned in detail with the wearisome question whether London did or did not survive through the Dark Ages of the 5th and 6th centuries. Were it not for the vague generalities of an obsessed 6th-century 'Welshman', writing a moral thesis probably in Brittany under difficulties which he himself deplures, no one would ever have suggested that London ceased to exist at the time of the Saxon invasions. Yet, it may be recalled, Gildas does not so much as mention London; he was not concerned with London; he was not indeed concerned with history save in so far as it could be subordinated to his propaganda against the sinners of western Britain. Whatever may have happened to the cities of the west, there is in truth no valid historical reason for supposing that London perished after the Roman period, to be born all over again in a Saxon England.

Nor is there any archaeological reason for this supposition, although archaeologists have not always (it must be confessed) seen clearly in the matter. Thus in 1912 the late Professor Haverfield told the Classical Association that 'for a while, London ceased to be. . . . Nothing has been found to suggest that Roman Britons dwelt in London long after A.D. 400. Nothing Saxon has been found to suggest that the English occupied it till long after A.D. 500. . . . It lay waste a hundred years'. Here Homer surely nods; for what are the facts? We know from Bede that in the 7th and 8th centuries London was the flourishing 'mart of many nations': nevertheless *only three* relics from the soil of the City can be ascribed with any certainty to those two centuries. On the other hand, to the supposedly 'blank' 5th and 6th centuries no less than *seventeen* relics from that soil can safely be ascribed. Such as it is, the archaeological evidence thus emphatically supports a Dark-Age London.

In these pages, then, I propose to assume that in some sort—if only as a sub-Roman slum—London lasted on through the Dark Ages; an urban anachronism, perhaps, at a time when the dominant element

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in the body-politic was mainly concerned with the fashioning of Rural England, but none the less an entity sufficiently living to transmit something of the Roman heritage to later times. It is not indeed difficult to imagine a 5th- or 6th-century Londoner muttering 'civis Romanus sum' as he put his stair-balusters on the kitchen-fire; and it is with this mental picture in the background that I turn to the neglected subject of the topographical development of London in and after the 7th century.

The materials for a reconstruction of the topography of Saxon London are not abundant, but they are by no means without significance, particularly if considered in relation to the topography of Roman London as it has been recovered from scraps of evidence in recent years. For a proper appreciation of the subject, it is necessary at the outset to recall the natural features of the site of the city within the lines of its Roman walls.

These walls enclosed an area of about 330 acres, divided almost centrally by the Walbrook, which still pursues its course beneath the Bank of England and the Mansion House and flows into the Thames immediately west of Cannon Street station. On each side of this stream, the natural surface of the ground rises gently to form two small hills, both attaining an altitude of about fifty feet above sea-level. The eastern height (Cornhill) is crowned by the ancient market of Leadenhall, overlooking the successive sites of London Bridge. On the western height, above the steep hill (Ludgate Hill) which drops towards the river Fleet, St. Paul's Cathedral, in one form or another, has stood since its foundation at the beginning of the 7th century. These two dominant buildings provide, in themselves, the basic clues to the topographical development of the early city.

The eastern building—Leadenhall Market—stands partially on the site of the great basilica, which, 500 feet in length and the longest Roman building north of Rome, must have formed the focus of public life in the Roman city. Herein, by analogy, were the administrative offices, the law-courts and the central meeting-place for business-men; whilst nearby would be the principal market-place of the city. In some degree, the medieval and modern market perpetuates this usage, though whether there was an actual continuity between the Roman basilica and forum and the medieval Leadenhall, we shall never know. In any case, both alike owed their position and their utility to the proximity of that determining factor in the history of the city—London Bridge.

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Archaeology has shown abundantly that it was on this hill above the bridge that the nucleus of the Roman city lay. Westwards across the Walbrook it began to straggle, indeed, at an early date, but the Roman street-plan here, towards Newgate, was governed by the purposeful lines of existing arterial roads rather than by the grid of a conventional Roman town-plan. An instructive analogy may be cited from Verulamium, where a similar extension of the town encompassed a stretch of the pre-existing Watling Street (FIG. 1). And, as at Verulamium, there is some evidence, particularly from the site of the General Post Office near Newgate, that the extension of Londinium, as outlined by the city-walls, was never very closely filled with buildings. It would seem that both at Verulamium and Londinium the final defences were planned to provide generously for a development which only in part materialized.

Bearing these primary facts in mind—the business-centre of the Roman city upon the eastern hill, and its more spaciouly-planned ‘West End’ upon the western—let us glance at the relevant evidence for the post-Roman period. This evidence falls into two categories: evidence of a structural kind, and the evidence of relics found in the soil.

In the former category, precedence must clearly be given to St. Paul’s Cathedral, founded by King Ethelbert early in the 7th century on the summit of the western hill of the city. If, as is likely enough, the massive Roman basilica still stood upon the eastern hill, the two dominant buildings were at once contrasting symbols of the old order and the new. And the contrast is further emphasized if we consider the distribution of other ecclesiastical dedications for which an early date is probable (FIG. 2). Admittedly, the dating of a dedication solely on presumptive grounds is a precarious business: the apostles, for instance, notably St. Peter and St. Paul, though they occur frequently as patrons in the early church, do not themselves imply an early date for any particular foundation. But certain of the early ecclesiastics and martyrs enjoyed a more limited vogue, and, with due reservation, we may note a number of London dedications which may be thought to belong to the first two centuries of Saxon Christianity. Close to St. Paul’s Cathedral stood churches dedicated to St. Gregory and St. Augustine (presumably the Gregorian missionary) and ascribable, therefore, to the period immediately following the re-conversion. St. Augustine’s church stood at the east end of St. Paul’s, and St. Gregory’s at the west; and this group of three churches has been

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compared with similar groups of the 7th century at Canterbury, Monkwearmouth, Malmesbury and elsewhere.¹ It may well be that,

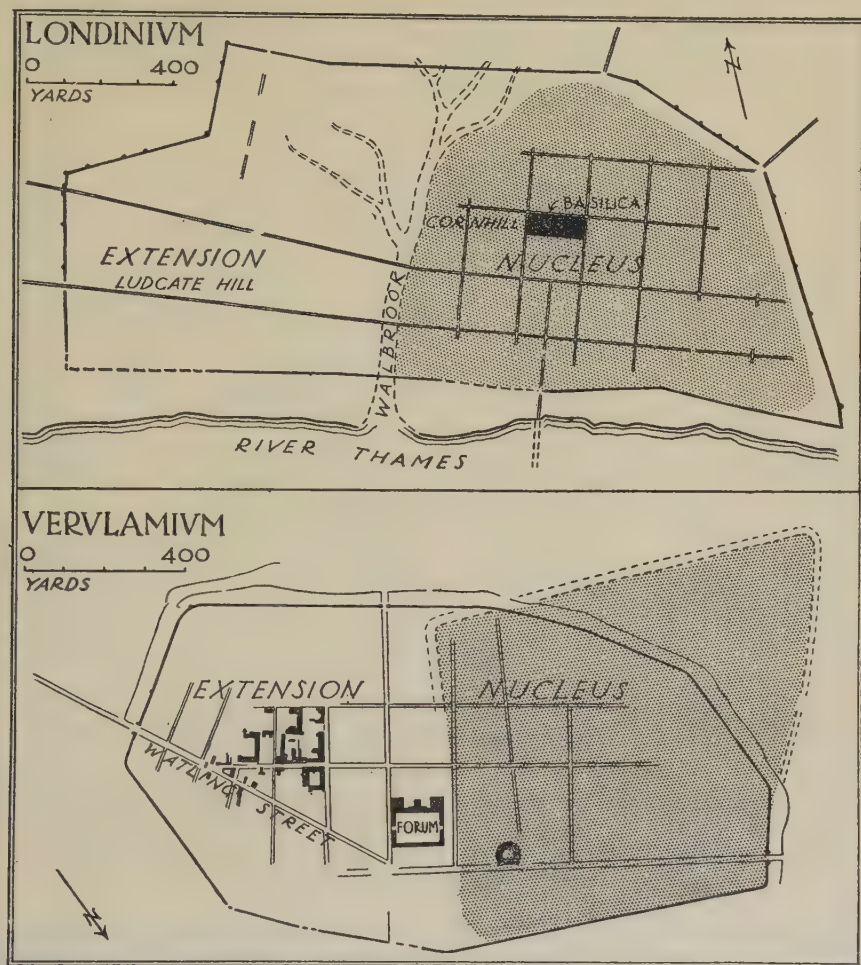


FIG. 1. SKETCH-PLANS OF ROMAN LONDON AND VERULAMIVM, TO SHOW THE 1ST-CENTURY NUCLEI OF THE TWO CITIES (STIPPLED AREAS) AND THEIR EXTENSION (INCLUDED WITHIN THE LATE 1ST- OR 2ND-CENTURY DEFENCES) ALONG THE ADJACENT HIGHWAYS

as in the partially surviving group at Canterbury (the Saxon churches of SS. Peter and Paul, St. Mary and St. Pancras), the three early

¹ A. W. Clapham, *English Romanesque Architecture before the Conquest*, p. 52. I am much indebted to Mr Clapham for reading the present paper and for helpful suggestions.

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churches at St. Paul's stood in alignment from west to east, forming a sort of procession of churches along the hilltop. Again, a small church, not rebuilt after the Great Fire, but situated formerly to the west of the Walbrook and adjoining Cheapside, bore the early dedication of St. Pancras. Likewise to the west of the Walbrook, churches dedicated to St. Martin, notably on Ludgate Hill and in Upper Thames Street,²

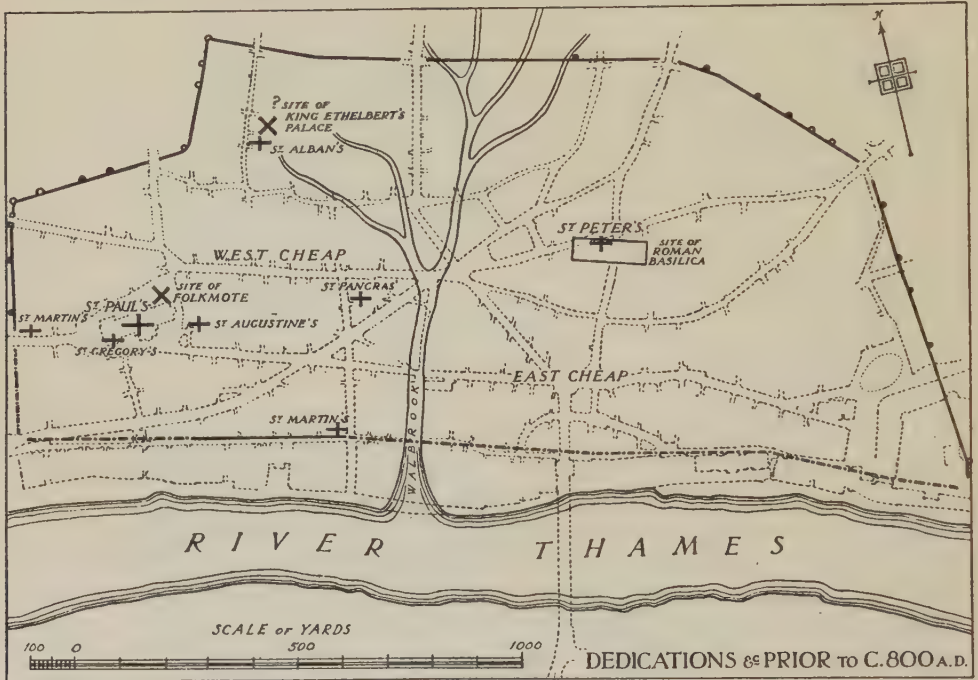


FIG. 2. DISTRIBUTION OF CHURCHES, ETC., ASCRIBABLE TO THE EARLIER SAXON PERIOD IN LONDON

may also be early; whilst the church of St. Alban in Wood Street may be associated with the revival of the cult of that British saint by Offa of Mercia in the 8th century.³

² The church of St. Martin-le-Grand may be equally early—its foundation has been variously ascribed to Cadwallain, to his followers in his memory and to Wihtraed king of Kent (694–725)—but, if so, it was refounded in 1068, and the Norman foundation is the only certain fact. See Victoria County History, *London*, I, 555.

³ This church is said by Matthew Paris (13th century) to have been a chapel of King Offa. *Lives of the Abbots*, ed. Wats, 1002.

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To the east of the Walbrook there is no similar group of early dedications. The contrast is remarkable, and is emphasized by an important exception. As early as 1417,⁴ and perhaps as early as the 12th century,⁵ the belief is known to have been current that St. Peter's church, Cornhill, was founded by King Lucius, 'to be', in the paraphrase of Stow, 'an Archbishops see, and Metropolitane or chiefe

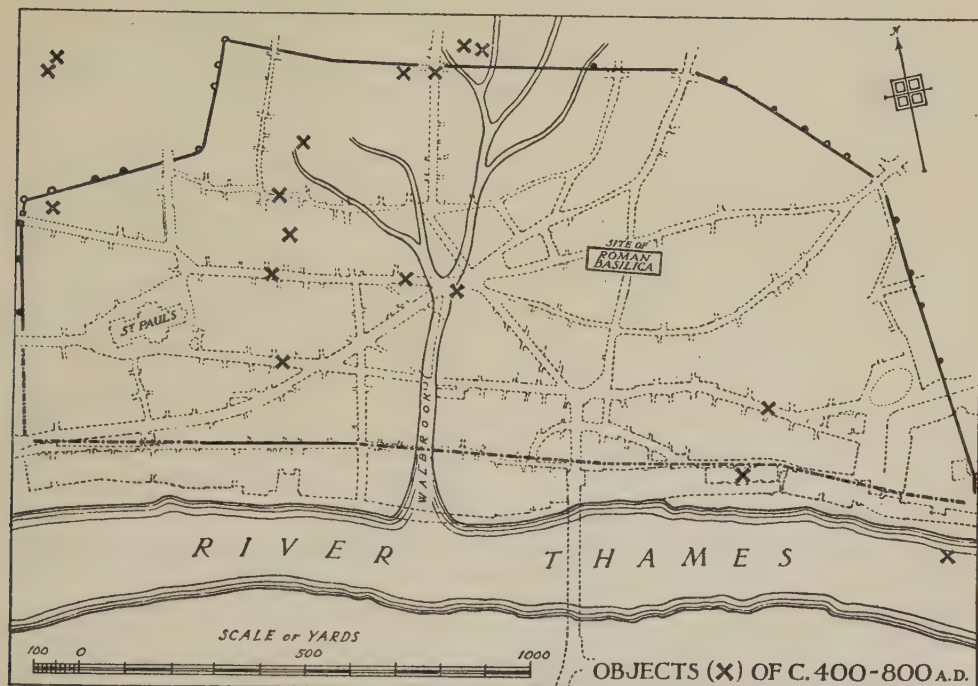


FIG. 3. DISTRIBUTION OF OBJECTS OF THE EARLIER SAXON PERIOD IN LONDON
(It will be observed that in Figs. 2 and 3 the distributions within the walled area have a *westerly* tendency)

church of his kingdome, and that it so endured the space of foure hundred years, untill the comming of Augustine the Monk and others from Rome, in the reigne of the Saxons'. This tradition is unlikely to

⁴ See C. L. Kingsford, *Stow's Survey of London*, II, 304; and H. T. Riley, *Memorials of London and London life in the XIIIth, XIVth and XVth centuries*, p. 653. In 1417, the rector of St. Peter's, Cornhill, was confirmed by the Mayor and Aldermen in his customary right to precedence in the Whit Monday processions, on the ground that St. Peter's was 'the first church founded in London'.

⁵ Stow cites an otherwise unknown work of Jocelyn of Furness as his authority.

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have arisen subsequently to the establishment of the episcopal see at St. Paul's ; and since, moreover, the erroneous association of Lucius with Britain (by confusion with Britium) can be traced back as far as 530 A.D.,⁶ the whole story may with probability be regarded as an essentially genuine piece of pre-Augustinian history—the essence of it being that medieval St. Peter's represented the episcopal church of the Roman city. Today, St. Peter's church stands upon a part of the great Roman basilica, and its remote predecessor may well have been a Roman church situated close to the forum and basilica, in a position reminiscent of that occupied by the little church in the Roman town of Silchester.⁷

Ecclesiastically, then, we are confronted with a group of apparently 7th- or 8th-century churches round the Saxon cathedral of St. Paul on the western hill of the city, and with the traditional centre of the older Roman Christianity on the eastern. The early concentration of the Saxon settlement upon the western hill is further emphasized by the secular evidence. It may be that King Ethelbert built a palace there, not far from his cathedral. An account dated 1531 relates to 'Expens and chargis in the clensying of certeyn olde ruinouise houses and grounds lying in Aldermanbury, sumtyme the Place of Saincte Aethelbert Kyng',⁸ and, though so late a tradition is not worth much in itself, it is not lacking in probability. It is supported by the statement of Matthew Paris that the church of St. Alban, in the adjacent Wood Street, was a chapel of King Offa and had been contiguous with his palace (above, p. 294, note 3); which was, we may suppose, the traditional London residence of the Saxon suzerains and derivable therefore from the first effective suzerainty—that of Ethelbert. But of greater import is the definite fact that, until its disuse at the end of the 13th century,

⁶ See C. Oman, *England before the Norman Conquest*, 7th ed., p. 178.

⁷ Without emphasis, another possibility may be suggested. There is every likelihood that the London basilica and forum were of the type represented at Silchester, Caerwent and elsewhere, and so approximated to the normal plan of the headquarters-building of a Roman fortress. Now in the military headquarters the central room at the back of the basilica was the official regimental shrine ; and it is likely enough that the corresponding room (emphasized at Silchester by an apse) at the back of the civil basilica fulfilled an equivalent function, as a sort of municipal chapel. Today, the high altar of St. Peter's, Cornhill, stands over the site of the central room at the back of the London basilica. Does St. Peter's thus represent, in all topographical literalness, a continuous tradition from the time when Christianity first became the official religion of Roman London, with an official altar in the old municipal shrine ?

⁸ *Royal Commission on Hist. MSS.*, 9th Report, p. 44a.

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the folkmote or assembly of the freemen of the city was held on a piece of land to the south of Westcheap and northeast of St. Paul's. The locale of this ancient and characteristically Teutonic institution is sufficient and conclusive evidence that the secular, no less than the ecclesiastical, focus of the early Saxon city lay upon the western of the twin hills.

If we turn from structural evidence to that of the relics which chance has preserved for us from the soil of London, the evidence is strikingly similar. It is becoming increasingly clear that archaeologically the culture of sub-Roman Britain, in contradistinction to that of Saxon Britain, was largely *negative* in character : the proof being that on non-Saxon sites known to have been occupied in the 5th or 6th centuries little that can be regarded as distinctive of those centuries has come to light.

In London this negative quality is exaggerated through the ancient destruction of the upper strata by building-operations ; but since this factor must equally have affected the survival of relics of the more positive culture of the Saxons, the comparative value of the available material is unimpaired. It is thus a notable fact that, of the London relics which have survived from the period 400–800, thirteen are known to have been found to the west of the Walbrook and only three to the east of it (FIG. 3).⁹ Most of these relics are of Saxon rather than sub-Roman type, and so notable a disproportion in their distribution can scarcely be accidental. They support the conclusion that the nucleus of the Saxon settlement lay to the west of the Walbrook. On the other hand, they are at the same time not inconsistent with the possibility of an aloof and ill-equipped sub-Roman population quartered contemporaneously in the old centre of the Roman city, to the east of the Walbrook. To this possibility we shall return.

In the later Saxon period (8th or 9th century to the Norman Conquest), the picture changes (FIG. 4). Churches now begin to spring up in the eastern no less than the western half of the city, and the distribution of relics extends equally throughout the walled area. Roman London now definitely and completely becomes Saxon London, a cultural unit once more commensurate with its Roman framework. The change was perfected during the first half of the 11th century, and many London churches probably date from that period of consolidation.

⁹ The Lists upon which the present maps are based will be included in a forthcoming London Museum publication, *London and the Saxons*.

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To the west of the Walbrook, on the banks of the stream, a church was built to St. Alphage sometime after the bishop's martyrdom in 1012. Churches to St. Mildred (d. early in the 8th century) in Bread Street and Poultry date probably from the period of revived interest attendant upon her disputed translation from Thanet to Canterbury in 1033. To a similarly late pre-Conquest date probably belongs the foundation of the church of St. Sith, alias St. Benet Shorehog, which, before the

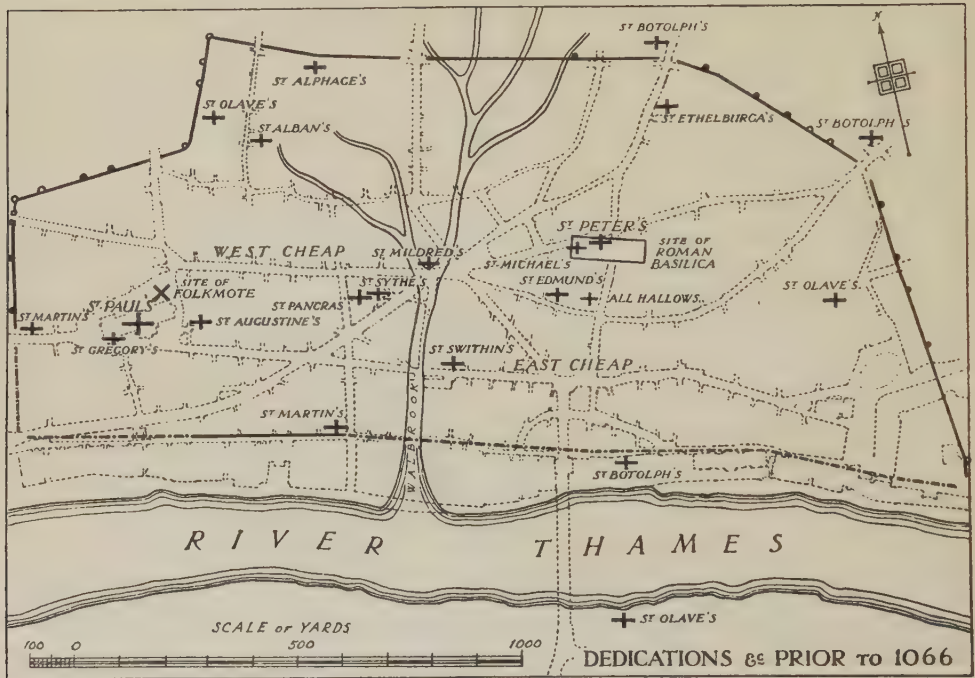


FIG. 4. DISTRIBUTION OF CHURCHES, ETC., DURING THE LATER SAXON PERIOD IN LONDON

Great Fire, stood in Pancras Lane, Queen Street, and commemorated the Saxon saint Osyth, in whose legend 7th-century and Danish elements are mingled. A little church which stood, also until the Great Fire, in Silver Street in the Aldersgate Ward was dedicated to St. Olave and must therefore have been founded after the death of that Norwegian king in 1030. St. Olave was not, indeed, officially canonized until the following century, but it is likely that his church in Silver Street, together with the better-known churches similarly dedicated in

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Hart Street (east of the Walbrook) and in Southwark, dates from the pre-Conquest generation when the saint's prowess was still fresh in the minds of the Londoners. Other dedications of late Saxon period in the eastern half of the city probably include the churches at Billingsgate, Aldgate and Bishopsgate commemorating St. Botolph, though at what interval of time after his death in 680 is doubtful; a church in Bishopsgate dedicated to St. Ethelburga, possibly the sister of the great bishop

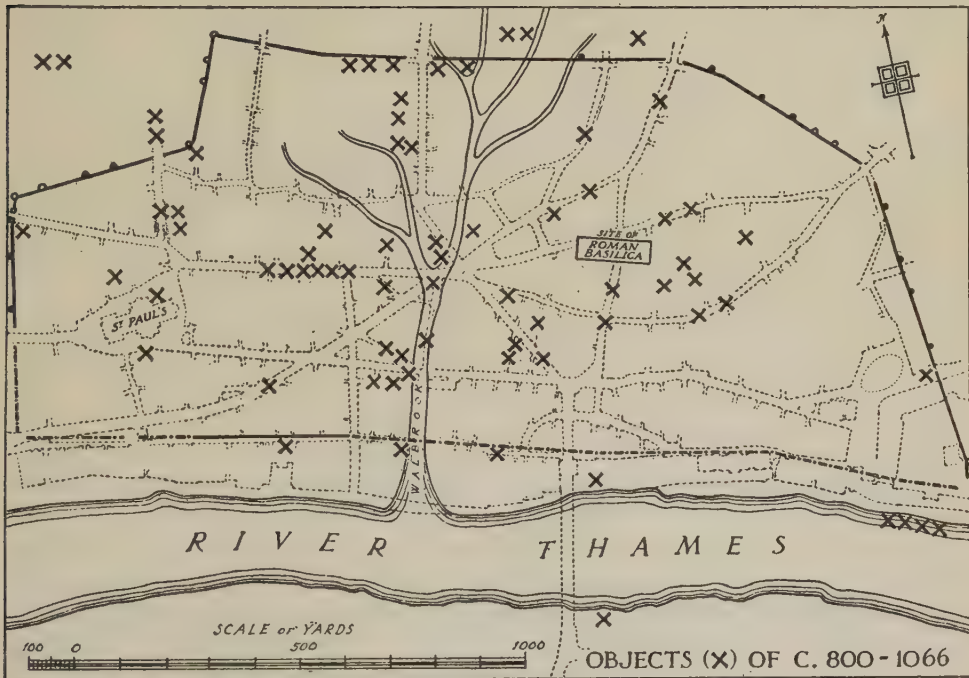


FIG. 5. DISTRIBUTION OF OBJECTS OF THE LATER SAXON PERIOD IN LONDON
(It will be observed that in Figs. 4 and 5 the distributions extend throughout the walled area)

Erkenwald who died in 693; another, near London Stone, to St. Swithin (d. 862); and another, in Lombard Street, to St. Edmund (d. 870), whose body was brought from Bury to London for security in 1010 and rested in St. Gregory's church by St. Paul's for three years¹⁰—doubtless the occasion of the dedication. Lastly, there is

¹⁰ It is sometimes asserted that the martyred king's body was preserved during this period in St. Helen's church, Bishopsgate, but the statement has no ancient authority, and seems to be a blunder of J. Entick, *History and Survey of London*, etc. (1766) III, 398.

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documentary evidence for the existence of All Hallows in Gracechurch Street and St. Michael's in Cornhill before the Norman Conquest.¹¹

This wide dissemination of ecclesiastical activity finds its counterpart in an equivalent diffusion of actual relics of occupation (FIG. 5). Between the beginning of the 9th and the middle of the 11th century, the earlier disharmony in the distribution of objects over the two halves of the city comes to an end. Of relics dating from this period, about thirty occur to the west of the Walbrook, twenty-one to the east and some half-dozen upon the line of the stream itself. The cultural unity of the whole of the walled area by the 11th century is sufficiently evident.

Such is the evidence for the topographical development of Saxon London. It is clear and significant that this development pursued a course diametrically opposite to that along which Roman London had evolved several centuries previously. Roman London began on the hill above London Bridge and spread westwards; Saxon London emerged on the western hilltop and spread eastwards. The reason for this deserves, in conclusion, a momentary consideration.

The Roman city, as the foundation of a great commercial power searching for the most seaward point at which the Thames could be bridged and maritime traffic conveniently focussed, was primarily a bridgehead-settlement at the more dominant end of the Southwark crossing. Its desultory extension westwards was a matter of no great or, at any rate, no enduring importance. Analogies in this matter are instructive. At Verulamium, where, as we have seen, an early Roman expansion comparable with that of London has been traced by excavation, we know that civic life and organization survived until after the visit of Germanus in 429; and yet this same excavation has shown clearly that, for over half a century before that event, a considerable part at least of the extended city was practically derelict. A reduced urban population had withdrawn from the outskirts into the vicinity of the central buildings of the town.

Similarly in Gaul: when the Gallic towns were walled or re-walled at the time of the German inroads of the 3rd century, the new defences normally enclosed only a part of the area formerly covered by buildings. Thus at Tours only 23 acres in the vicinity of the amphitheatre were protected at this time; at Perigueux—a substantial Roman town in its best days—a mere 13½ acres, again beside the amphitheatre, were defended; and at Sens, one of the most distinguished cities of Roman

¹¹ F. M. Stenton and E. Jeffries Davis, *Norman London* (Historical Assn., 1934), map.

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Gaul, only 47 acres were walled. Many other examples could be cited, and it is clear that in 4th-century Gaul the urban populations whose safety was of any consequence had dwindled in many cases to a shadow of their former bulk.

Nor can the case have been vastly different in Londinium. Here we may safely assume in the 4th century, and still more in the 5th, a shrinkage of the population and a concentration of it round the nodal buildings of the city—*i.e.* about the bridge, and the basilica on the eastern hill. When, therefore, the East Saxons from the Thames estuary and, later, the civilized and partially urbanized Jutes of Kent, began in the 6th century to display an effective interest in London, it was on the relatively vacant hill to the west of the Walbrook that they obtained their easiest foothold, with the results which have been indicated above. For a time, the new Saxon town of St. Paul's and the old Roman city (shall we say) of St. Peter's¹² lay side-by-side, essentially distinct from each other, with the Walbrook between them. Gradually, with the passing of the years, Saxon and British interests converged, and Saxon influence interpenetrated the sub-Roman element in eastern London, without, perhaps, completely demolishing its Roman traditions. But the old, natural *limes*, the Walbrook, long continued in one way or another to exert an influence upon the affairs of the city. The position in late Saxon and post-Conquest times was well stated by the late Dr William Page. After suggesting that the Walbrook may have formed the division between the two stallerships of London, Mr Page observes that the stream 'divided London into two very distinct and almost equal halves. Each of these districts had its separate market-place [East Cheap and West Cheap], its separate wharves with different customs, and its different rules for bakers and sellers of other provisions; and each side supplied eighteen sworn men to form the thirty-six selected for the purgation by the Lex Magna of those accused of the greater crimes. More important perhaps was the division which the Walbrook afforded for separating the wards into two groups for assessments and other purposes, a system which was in use as late as the time of Stow. In this way London, like many French cities, was,

¹² Whether we should follow the medieval Lucius tradition to the length of presuming a continuous Christian cult at St. Peter's throughout the Dark Ages is questionable. Such a continuity is not, indeed, impossible. On general grounds, the lingering of Christianity in a sub-Roman slum is scarcely less likely than its active survival in the crofts of the 'Roman citizens' of the Celtic outlands. At the best, however, we must suppose that the Christianity of 6th-century London was a withered growth.

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before the 11th century, composed of the *cité* with its royal residence and cathedral establishment on the west, and the *bourg* with its mercantile population and institutions on the east'.¹³

The ultimate origin of this separateness is, of course, to be sought in the conveniently symmetrical geography of the site. But it is here postulated that the geographical duality of London received a sort of political sanction during the 6th and 7th centuries when, it seems, the natural division of the city became, for a time, a cultural division also. It can at least be affirmed that all the available evidence is in accordance with this view.

¹³ *London : its Origin and Early Development* (1923), p. 194. It may be added that the old division has been retained in the allocation of parishes to the two modern deaneries of London.

Some Observations on Recent Geological Movements of the British Coastline

by O. T. JONES

Professor of Geology, Cambridge University

IT is well known that in geologically recent times the British Isles have been affected by vertical movements, both upwards as shown by raised beaches and downwards as proved by submerged land surfaces and drowned valleys. There are still differences of opinion whether these movements result from changes in the level of the ocean surface or are due to real upward or downward movements of the land area. In the former case a change of sea level might be expected to produce within small limits the same amount of apparent elevation or depression of the land area, whereas in the latter case the amount of movement might vary at different parts of the coastline.

On many parts of the coast of Scotland a raised beach standing at approximately 25 feet above the sea is a prominent feature, and in the south of England and Wales there are many places where beach-deposits resting on a rock platform can be seen at about the same level above the sea. The existence of a beach at about the same level both in the south and in the north of the British Isles cannot, however, be regarded as proof of uniform upward movement, since it is now certain that the beaches in the north and those in the south are of different geological ages.

It may be of interest to review briefly the nature of these recent movements of the British coastline. It is impossible in a brief article to do more than outline the main feature of the available evidence. The criteria for determining the age of movements and for the correlation of movements in different parts of the coast are of several kinds—physical or stratigraphical, faunal or floral, and cultural. In some cases two or more of these exist together, in others only one may be available.

On some parts of the coast raised beaches are found within a short distance of drowned valleys or submerged land surfaces, proving that

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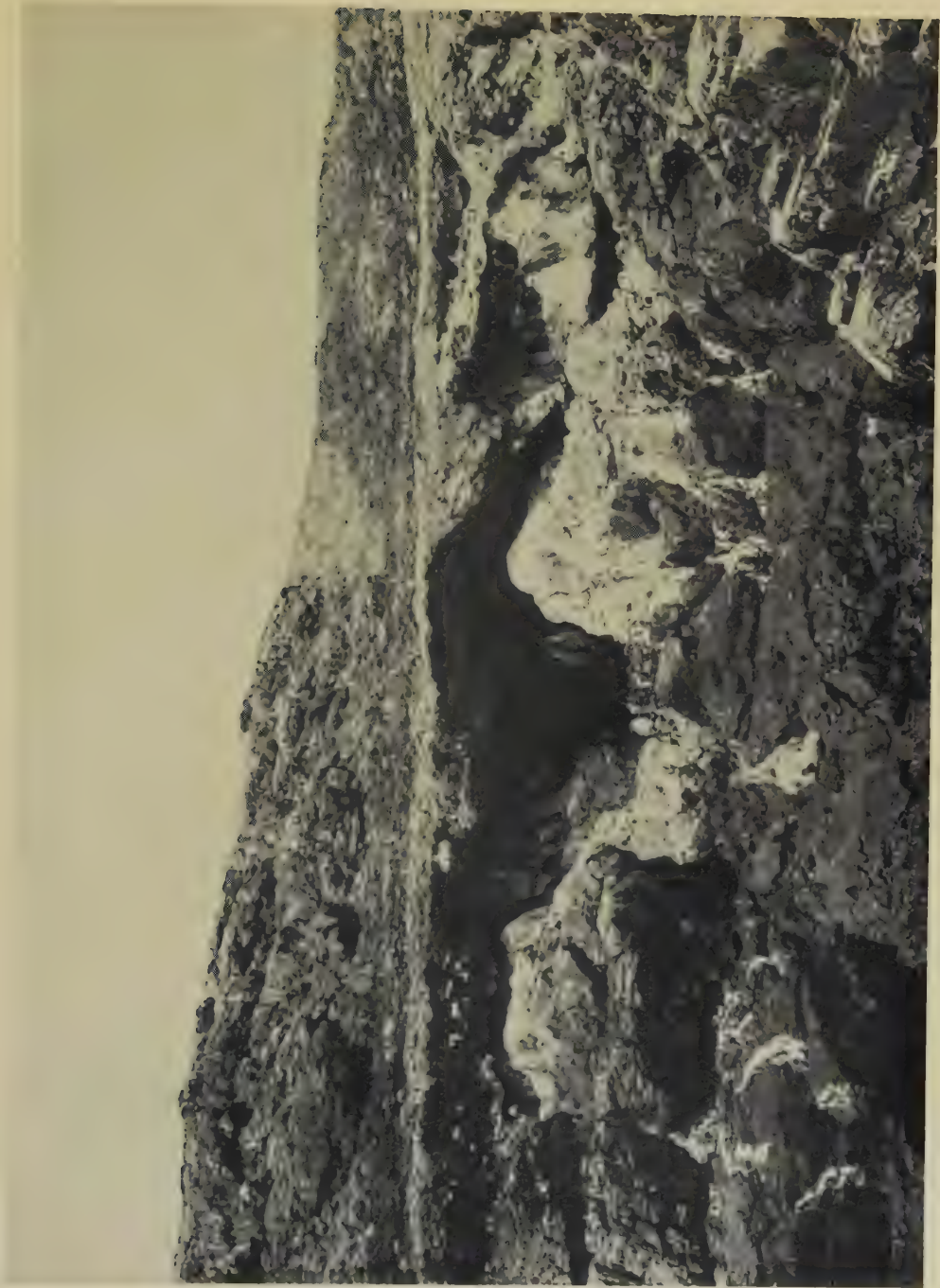
both upward and downward movements have affected the same region, and the relative position above the level of the sea of a feature such as a raised beach is the resultant of all movements that have occurred since the beach was formed. In general in the south of Britain the latest movement is an apparent depression of the area, but in the north it is probable that during the same period the land was rising. Let us suppose, therefore, that on a particular stretch of coast a raised beach occurs at 25 feet above sea level, and that in a nearby region there is evidence of a depression of 100 feet which occurred after the raised beach period. It follows that subsequently to the deposition of the materials that form the raised beach the land was apparently elevated 125 feet and afterwards depressed by 100 feet.

In considering the evidence of movement furnished by raised beaches one must therefore take into account the history of the area subsequent to the period of formation of the beach.

In illustration of these principles, I may refer to the evidence of movements on the coast of South Wales, especially in the Gower Peninsula and near Swansea. On various parts of the Gower coast there are well-developed remains of an extensive raised beach consisting of rolled pebbles with shells resting on a rock shelf and standing some 25 to 30 feet above high-water mark. At the general level of the raised beach there are caves in the limestone cliffs in which the rock shelf has been eroded and some of these caves were accessible to the sea when the beach was formed. Many of the caves have been explored and have yielded remains of prehistoric mammalia. The most important of these include *Elephas antiquus* and *Rhinoceras tichorhinus*, both of which are familiar in so-called early Pleistocene deposits. In some of the sections the subsequent history of the area is recorded in the materials which overlie the beach. These consist of blown sand, followed by a rubble of angular limestone fragments with some interstitial sand and clay, which have been derived by prolonged weathering of the limestone cliff which overlooked the rock shelf on which the beach material rests.

From this succession we may draw the following inferences. At a time when the level of the land with respect to the sea was some 30 to 35 feet lower than at present, the waves eroded the Carboniferous limestone rock of the Gower coast and produced a rock platform backed by a steep limestone cliff. At the same time caves were eroded at the foot of the cliff into which the sea entered. There is no direct evidence that during this period of marine erosion the land was sinking

PLATE I



RAISED BEACH ON SOUTHWEST SIDE OF GRASSHOLM ISLAND, PEMBROKESHIRE
(By permission of the Geological Survey and Museum and with the sanction of the Controller of H. M. Stationery Office)

PLATE II



RAISED BEACH (CONCRETED SHINGLE AND SHELLS) OVERLAIN BY 'HEAD' AND RESTING ON CARBONIFEROUS LIMESTONE
BETWEEN PWLL-DU AND BRANDY COVE, CASWELL BAY, GOWER PENINSULA
(By permission of the Geological Survey and Museum and with the sanction of the Controller of H.M. Stationery Office)

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relatively to the sea, but it is possible that the advance of the sea and the erosion of the sloping rock platform may have been due to a progressive relative rise of sea level. It is uncertain whether during this period of erosion beach materials were being deposited at the same time, but it is probable that the erosion was assisted by the beach pebbles and sand which were hurled by the waves against the base of the cliff and into the caves. The rock shelf presumably sloped seaward, and in that direction gradually sank beneath the sands of the foreshore. This episode was brought to a close by a relative rise of the land area, so that the sea retreated until the beach pebbles and sand were no longer within reach of the sea, and were left undisturbed on the rock platform and in the caves. There is no direct information regarding the extent of the withdrawal of the sea. The sands which overlie the beach are, however, blown sands and it must be presumed that as a result of the relative elevation a considerable stretch of bare sandy foreshore previously covered by the waves was laid bare. This sandy tract furnished the materials for the deposit of blown sand, which was banked up against the abandoned cliff. As soon also as the base of the cliff ceased being kept clear by wave action, the debris produced by weathering of the cliff began to accumulate. In the first stage after the withdrawal of the sea, very little of such material is found among the blown sand deposits. From this it may probably be inferred that the period of blown sand accumulation was relatively short, but from the extent of the deposit a considerable stretch of foreshore must have been exposed, thus leading to the conclusion that the apparent rise of the land was relatively rapid and of considerable amount. The angular deposit which overlies the blown sand is of a type familiar in the south of England, and corresponds to what is termed 'head' in Devon and Cornwall. It is a product of sub-aerial weathering on a steep slope, the rocks broken down by weathering gradually travelling downwards under the action of gravity, and spreading out at the foot of the slope. In consequence of its mode of formation it often has an imperfectly stratified appearance, the stratification being inclined at a considerable angle. The head may extend to a considerable distance forward from the foot of the original slope, and in general becomes finer grained as its distance from the cliff slope increases.

The Gower raised beach is also of great interest because on parts of the coast the head is overlain by unmistakable glacial deposits containing abundant rounded and scratched rocks foreign to the locality, embedded in a gravelly matrix. This area furnished for the first time

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unequivocal evidence that the raised beach deposits were of earlier date than the glacial deposits of that part of Wales. The fact that the head is immediately overlain by glacial deposits prompts the suggestion that the great thickness of angular material which covers the beach may be due to unusual rapidity of rock weathering such as might result from extreme climatic conditions. In Gower, there is, however, no direct proof of this view, but in parts of the South of England it is clear that great deposits of angular deposits called coombe rock show a fairly close connexion with glacial conditions. This will be referred to later.

The subsequent history of the region is shown by the Tawe Valley a few miles to the northeast. About 6 miles above the mouth of the river at Swansea, a great ridge of glacial deposits crosses the valley near Clydach. This ridge is a terminal moraine of the ice which halted there during its retreat northwards. There are glacial deposits almost continuously developed between this moraine and Gower, but whether the material which overlies the raised beach at the coast belongs to a further extension of the ice sheet which on its retreat deposited the moraine, or whether they belong to an earlier glaciation, has not been decisively proved. South, or in front of, the moraine there is an extensive plain of outwash gravels. The present river channel, which is occupied by alluvial deposits, lies to one side of the outwash plain and at a lower level. Its floor has been proved to descend to a depth of over 130 feet below Ordnance Datum, and the valley is filled by river gravels and sands and by clays probably of lacustrine origin. The coarseness of the gravels at the base of the infilling indicates that they were transported by a powerful stream which presumably had a gradient seawards at least as great as that of the modern river Tawe. The surface of the sea when this channel was eroded must therefore have been at least 150 feet lower than its present level.

These observations reveal, therefore, that at some time after the retreat of the ice and the formation of the outwash plain in front of the moraine there was a relative rise of the land to at least 150 feet higher than its present level and a subsequent depression to its existing position. There is no direct evidence of the relative level of land and sea prior to the post-glacial elevation, though there is some probability that it was not very different from the present level. It is likely also that the elevation which succeeded the raised beach deposition carried the land to a greater height than it occupied near the end of the glacial period, so that between that elevation and the succeeding post-glacial elevation there may have been depression of the land.

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The evidence as to the date of these movements may be stated briefly. In a cave (Bacon Hole) adjoining the raised beach a marine sand with littoral shells is overlain by sands and cave earth containing remains of *Elephas antiquus*, *Rhinoceras leptorhinus*, and other mammals which are usually regarded as of early Pleistocene age. These are covered by a thick layer of stalagmite and bone breccia. The occupation of the cave by these extinct mammalia occurred, therefore, during or later than the elevation of the land which raised the caves and the beach above the reach of the waves.

The alluvial and other deposits which occupy the channel of the river Tawe include two or three beds of peat, the lowest of which is over 50 feet below Ordnance Datum and the highest some 5 to 10 feet below Ordnance Datum. The latter appears to be coeval with the submerged forests exposed in various parts of the coast of South Wales and may probably be referred to the early Bronze Age or latest Neolithic. Since that peat bed was formed there has been a relative depression of the land area of at least 25 to 30 feet, and since the lowest bed of peat was formed a depression of at least 70 feet. This depression was however only the latest stage of the much greater depression indicated by the deposits that occupy the deepest part of the Tawe Channel. One can, therefore, state broadly that the depression began some time after the latest glaciation of South Wales and continued into the beginning of the Bronze Age. The greater part of the movement occurred probably during the Mesolithic-Neolithic period.

Turning to the south coast of Britain the most conclusive evidence comes from the area between Brighton and Portsmouth. At Brighton there is a well known raised beach standing at about 15 feet above present sea level. It is overlain by a great thickness of coombe rock which is generally attributed to the Middle Pleistocene. The fauna (mammoth, etc.) is that frequently associated with coombe rocks in the south of England and with Mousterian cultures. At Selsey Bill this beach with overlying coombe rock is underlain at some distance below by marine clays with an abundant fauna of mollusca which lived at a depth of some 20 fathoms. The molluscs are associated with *Elephas antiquus*, and starting from the period when this clay was deposited it is obvious that there has been a considerable elevation of the area since the clay is now exposed just above low tide mark.

Farther inland there is a raised beach which yielded the above fauna and also implements which include some of late Acheulean age. The level of this beach at between 100 and 130 feet above Ordnance

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Datum, together with its community of mammalian fauna with that of the clay on the foreshore at Selsey Bill, and also the depth of the sea in which the molluscan fauna lived all suggest that the high level beach marks approximately the margin of the sea in which the molluscan was deposited. Here then we have a beach containing the same characteristic mammalia as in the bone caves of Gower but standing at a level nearly 100 feet higher, whereas on the nearby coast there is a raised beach at approximately the same level as that of Gower yet almost certainly of much later date. These examples illustrate the danger of assuming that a raised beach which stands at a given height above sea level is of the same age as another beach in another part of the British coastline which stands at the same level.

The evidence regarding the age and extent of later movements of the English Channel region is not as complete as in South Wales, but the great depth to the rock floor of some of the valleys of South Devon indicates that a depression of more than 100 feet has occurred since these valleys were excavated. The total extent of the depression is unknown but is not likely to have been less than that of South Wales. In some of the valleys, peat beds have been found considerably below sea level, so that the latest phase of movement was probably a depression. The high level beach which now stands more than 100 feet above sea level may therefore have stood 250 feet or more above that level before the depression set in.

If we consider the northwestern coastline of Britain we find a very different state of affairs. In Scotland there are places in three conspicuous shelves or platforms which are generally referred to as the 25-foot, the 50-foot and 100-foot raised beaches. It is probable that if any one of these beaches was carefully traced the level would be found to vary from place to place, and it is quite possible that a 50-foot beach in the southwest of Scotland might prove to be a 100-foot beach farther north. This question is one that requires re-examination.

It is believed that both the 50-foot and the 100-foot beaches were deposited while glaciers occupied the upper ends of some of the Highland valleys. The rise has therefore occurred during and after the glaciation of the Highlands, which was probably distinctly later than the latest glaciation of South Wales. The 25-foot raised beach is definitely post-glacial, since the shelf on which it rests is covered in glacial clays. This beach is also well seen on the Antrim coast of Ireland. From there its level falls continuously southwards until at a few miles south of Dublin it stands at the present sea level.

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The most important evidence regarding the age of the 25-foot raised beach of Northern Britain is obtained at Larne, near Belfast. The Larne beach has yielded large numbers of stone axes which have commonly been referred to the Neolithic period, but at the present time that term has become somewhat vague. The beach materials were laid down during an advance of the sea resulting from a relative depression of the land. The axes are either contemporaneous with the formation of the beach, or were washed in from a pre-existing coastal tract during the advance of the sea upon the land, in which case the axes are older than the beach materials.

In Belfast Lough, a submerged bed of peat is overlain by estuarine deposits which are said to be of the age of the Larne gravels. If this statement is correct, then during the formation of the Larne beach deposits depression was in progress which resulted in a pre-existing land surface being carried to a considerable depth below sea level. Subsequently to the depression there has been elevation of the coastline and the beach materials have in consequence been elevated to form the well-known Larne raised beach (or 25-foot beach of Antrim) and the peat bed is less deeply submerged than formerly. If one may equate approximately the submerged peat in Belfast Lough with the earliest peat beds in South Britain, then it is significant that since these beds were formed the earlier movement in both regions was one of depression ; the later movement, however, was a continued depression in the south but an uplift in the north. There is no doubt, therefore, that the latest movement recorded on the British coastline affected different parts of the coast to varying degrees and must without question be referred to an actual movement of the land, and therefore did not affect the level of the ocean as a whole.

Further, the existence of such considerable differential movements in very late geological times should inspire caution in using the levels of raised beaches as criteria of age.

Isborsk—a Viking Stronghold

by L. TUDEER

LITTLE has been known of the Viking expansion in the East Baltic till some 10–12 years ago, when the new states of Estonia, Latvia and Lithuania began an enthusiastic exploration of their antiquities, in which research they have been joined by Finnish and Swedish archaeologists. In Russia, the Viking traces in Russian history have been the object of research for many years, and there the Nestor chronicle has been a literary guide to the results, which have given glimpses of the life of those ancient times—of the long water routes over Europe, the settlements founded by the Vikings, and the great cemeteries of primitive graves, outside those towns. In the following sketch of a Viking stronghold of the 8th–9th century no attempt is made to describe the many archaeological finds in systematic excavations* ; it is merely the impression, a strangely living impression, of one of those ancient places upon the ordinary tourist.

In Isborsk, 7 kilometres from the boundary line between Estonia and Russia, we have two centres of interest—firstly, the remains of the old hill-fort, ‘Truvor’s fort’, which was the Viking outpost, dating from some year between 860 and 900—and also the huge ruin of the later fortress built in 1330 by the Slavs for the protection of Pskoff, one of their important towns. This ruin still stands, now on the outskirts of a new independent state, which is still struggling against the weight of centuries of occupation by Danes, Swedes, Germans and Russians. The district round Isborsk is Russian in character, for it has belonged to Russia for centuries, but in Isborsk and its surroundings you find something more than a marvellously preserved old Russian historical atmosphere. The great ruin and the high plateau on which stood the first Viking stronghold, and the wide valley over which they held guard, seem to hold in themselves something so much older,

* Among the finds at Maly, a village 4 kilometres from Isborsk, an Anglo-Saxon coin was found dating from the time of Ethelred II (979–1016).

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something which is not only Russian. In that saga-like landscape, Isborsk stands like an incarnation of primitive age—of the plainness and the severity of the past, a past made almost audible here, so full is it of legendary happenings—yet it lies so wonderfully near and accessible to us.

The huge chalk stone walls and bastions of the fortress of Isborsk stand on high ground, overlooking a wide expanse of rolling downs, with many winding streams seeking their placid way between dark patches of woodland. Long white roads like ribands lead into the distance and ruddy slashes of 'old red' soil show in the gently sloping hillsides; this forms the background to the many groups of peasants' little grey houses, with their leaning fences and bits of kitchen gardens and narrow sunken lanes, and to the many low white churches with their quaint steeples and bright blue cupolas, which lie under the high sheltering walls of the old fortress.

This peaceful landscape lies so near the sinister mystery on the other side of the frontier, that in the sunset hours of a clear day the masses of the Cathedral at Pskoff etch themselves on the horizon in a glitter of golden domes and cupolas—so near is the great mother-church of the Pskoff 'Trinity' to its 'little brother', the church of St. Nicolas at Isborsk.

Sometimes it seems as if Fate unexpectedly gave you a perfectly finished picture, complete in every respect, in form and colouring and atmosphere. Isborsk at present recalls an old-world tapestry; the saga-like legend is there, and in the hazy distance the fighting tribes pass down the winding roads to Pskoff—to Novgorod and Moscow, and the very air seems to hold memories of the life, the strivings and the strife of centuries; for round this great gateway to the East hordes of Lithuanians, Vikings, Slavs, Swedes, Germans, Danes, Russians, Estonians and Finns have fought, and passed.

Isborsk belongs to what is almost legendary Russian history, and out of its dim antiquity we get that story of the three princes, who at the call of the fighting, quarrelsome Slavs came from 'over the sea', from 'out of the west' to rule over them.

The Slavonic tribes, emigrating from Bohemia, Silesia, Prussia and the shores of the Danube, eastward to Kief and Smolensk, and northward to Novgorod, found the country into which they penetrated (forest-land, with deep rivers) inhabited by various tribes of Estonians and Finns. They were gradually driven north and west and when the Slavs settled there, these tribes were on a line roughly up to Isborsk.

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Southward were the Letts and Lithuanians, while nomadic Mongols inhabited the southern steppes.

Through these lands went the great waterways by which the Vikings maintained contact between the West and the Byzantine Empire and the Orient, trading and marauding by way of the Finnish Gulf and Lake Ilmen, and the great Russian rivers—the Dnieper and the Volga to the Black Sea and Constantinople. They established colonies all along these water routes, acting chiefly as guards to the great caravans of merchandise which flowed back and forth through Europe.

It seems probable that they had already lost much of their power and were being driven out by the growing strength of the Slavs, when after some decades of fighting among themselves the Slavonic princes recalled them in 862. Here we get the well-known and typically Russian phrase, in the appeal of the ambassadors to the Viking chiefs: 'Our country is rich and great, but there is no order among us, come and rule over us'.

The legend further tells of the three brothers, Rurik, Sineus and Truvor, who answered the call and came with their households and followers and ruled—Rurik over Novgorod, Sineus at the White Lake, and Truvor at Isborsk. (This dynasty ruled the land through petty princes till the end of the 16th century, Ivan the Terrible being one of the last).

But we will return to the country round Isborsk, to Pskoff, and Novgorod.

Towns grew, as the Russian Empire expanded to the north, to Walamo and Archangel on the west; the German knights of the monkish orders were also growing strong, fortresses on both side were built, both sides invaded each others' territory, and the local population, the Letts and Estonians and Finns, were massacred by both.

Isborsk had been a fortified place in the Stone Age—under Truvor it became the chief Slavonic outpost against German aggression, which was already firmly planted in Reval and Riga. (And the trend to 'Balticum' has survived all the centuries and is true today).

Here on the hill, where now the cemetery lies, stood the first Viking fort. Surrounded on three sides by wide marshes and impenetrable forests, the approach to it from the west was guarded by a double moat, a high earthwork between the two being crowned by a stout stockade—and an old chronicle tells us that the only road by which the enemy could attack was covered by huge, loose boulders, thus making any military attack impossible.



ISBORSK, ESTONIA: THE FORTRESS AND PART OF VILLAGE

ISBORSK—A VIKING STRONGHOLD

Here Truvor reigned for two years, here he died and was buried, as the church records at Pskoff tells us, 'according to pagan ritual'—and then till the 13th century there is silence in the records about his name.

But from the time of Truvor, Isborsk was the centre of warring expeditions. From manuscripts in the archives at Pskoff, we find that between 1030 and 1233, there had been 20 such attacks upon and from the fort, while in the later days of the century there was constant fighting. This perpetual state of warfare is explained by the appearance at this time of the Germanic knights, who at war with the Letts and Lithuanians and Estonians were now striving towards the lands of Pskoff and Novgorod.

In all this fighting, Isborsk bore a major part. In 1233, the Germans having taken the forts, help was sent from Pskoff, the Slavs retook the place and captured the German leader. After seven years of imprisonment in Pskoff, he escaped, joined the German forces and again took Isborsk; Pskoff again sent reinforcements, which however were completely destroyed. Isborsk was held for two years, when Ivan Newski relieved the place from German rule.

It was not till 30 years later that the Germans made another attempt, when they took and burned the old fort—to be again driven away.

In 1330 Isborsk was rebuilt—and now it became a huge strong fortress, with high stone walls and eight bastions—and still war flowed back and forth round it through the centuries.

The Viking rule had passed; taken by Germans, retaken by the Russians, Isborsk, the guardian outpost of the Slavs, fought for Pskoff, fought Novgorod, was besieged by the people of Pskoff, was taken by the Poles, was given by them to Moscow; and when Moscow needed help against her warring princes, it demanded men from Novgorod and Pskoff and Isborsk.

Through all these years of wars and bloodshed Russia was ever growing stronger, and after 1700 Pskoff, and its outpost across the marshes, remained in peace in Russian hands, but its military importance had waned.

Peter the Great thought to make use of the fortress in his war with Charles XII but it would have required much alteration and repair, and nothing was ever done. Again long years passed and now Isborsk, like an old soldier who has served his time, lives through the days in peace and tranquillity. Today, the past wraps its strange magic round the ruins, in that saga-like landscape where once the Vikings ruled,

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and the old fortress still stands there, sad, and proud and lonely, still looking 'over the fords' to Pskoff. Wrapped in dim memories of the past, it has surely never dreamed that its own people, for whom it fought for centuries would leave it so desolate !

But the people of Isborsk are true to its old tradition. They firmly believe that Truvor lies in the big grave on the cemetery hill, and that the great stone cross which marks the grave is his. Truvor was of course a pagan, and the cross with its undecipherable squares and circles must have been raised to another—a Christian chieftain—yet in some strange way Truvor's spirit dominates the place. Your thoughts go back through the ages, through those centuries of struggle, through the medley of peoples, and tribes, so many, and differing in race and beliefs, to the young Viking chief who died so soon in the new country he came to rule over.

Sineus and Truvor died and it was Rurik who reigned over the growing Russian Empire ; Rurik was the stone upon whom the new empire was built.

Sineus and Truvor have become almost mystical legendary figures and wise antiquaries dispute if they ever existed.

The Russian artist, Belebin, has painted those early knights as riding along the winding roads and through the dark forests—and Roerich the great painter has shown us some of those low, little white churches, with their tall narrow steeples.

Isborsk belongs to the fairyland of history, out of which has grown the fascination of Russian art and colouring. In the primitive faded tapestry which today is Isborsk, you still see a great living Past.

Salvian and the Ruin of the Roman Empire

by RAYMOND THOUVENOT*

AT the moment when Attila was preparing to attack the Western Empire a priest named Salvian, driven by the invasions from the Rhineland to Marseilles, published his tract *De Gubernatione Dei*, one of the strangest amongst the offspring of declining Latin literature.

The political situation was then most serious. The Franks occupied most of northern Gaul ; the Burgundians were established on the Jura and in Savoy ; Brittany and the Armorican towns had seceded ; Aquitaine was in the hands of the Goths, Lusitania in those of the Suevi ; the Vandals held Baetica and in 429 invaded Africa. There remained to the emperors of Ravenna only Italy and the valley of the Rhône. Confronted with disasters such as these, many Romans blamed Providence, asking why God allowed Rome to perish now that she had become Christian ? They then concluded that he could not be interested in the affairs of this world, when he allowed pagan or heretic barbarians to triumph. It was to fortify their shaken faith that between 440 and 450 Salvian wrote his book. In it he showed that the troubles of his fellow-countrymen were inflicted as a just punishment for their sins, whilst the barbarians achieved victory through their own merits.

No doubt the *De Gubernatione* contains much exaggeration : Salvian always overstates his opinions. It must also be remembered that he was out to justify Providence at all costs, and that he does not pretend to write as a historian. Sulpicius Severus, Paulinus of Nola, Sidonius Apollinaris, none of whom were prejudiced, have left in their letters the portrait of a society which was both polished and upright. Yet I think Salvian's work, declamatory though it be, provides valuable evidence of the deeply rooted causes that brought about the fall of the Empire ; and it is this evidence that I propose to try and classify.

Salvian first of all takes note of the military decline of the empire. It was long since the legions had been recruited from amongst the sturdy Italian peasants. Since the formation of a professional army the mass of the people had forgotten the science of arms. At the onset of the invasions, therefore, when the dissolute Roman troops could no longer hold every front, the provincials could not organize themselves in defence of their cities. There were exceptions ; Aquileia had

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opposed Maximinian and Rome withstood Alaric ; and Ammianus Marcellinus praised the bravery of the Gaulish soldiers. But it was exceptional to find peoples like the Armoricans and Arverni, who when left to their own devices, valiantly prolonged the struggle against the barbarians. Everywhere else resistance was weak or altogether lacking, because men had forgotten how to fight. For four centuries the peoples of Italy and of the provinces had relied upon mercenaries for their protection, desiring only to be left in the peaceful enjoyment of their accumulated wealth ; and the terrible alarms of the third century had hardly disturbed that peace. ' When the barbarians pitched their tents almost within sight of us all, no one displayed any anxiety, nor were the towns put in a state of defence. So great was our blindness that, though unwilling to perish, we no longer did anything to save ourselves ; on every side heedlessness, weakness and negligence prevailed (VII, 80, 81). The justness of Salvian's censure is evidenced by the fact that, at the moment when the attack on their city was launched, the magistrates of Cologne were actually found in the midst of a banquet.

The imperial army itself no longer resembled the legions of Trajan or Septimius Severus. It was Roman only in name ; the only national elements in it were those recruits, of no great value, who were supplied by the big landowners or raised in the least romanized of the provinces. The bulk of the troops consisted of barbarian levies paid by the emperor to defend the empire against other barbarians. In Europe the Goths were hurled against the Alans, the Alemanni against the Burgundians, the Huns against the Goths. In Africa the Ausurians were only repulsed by the cavalry of the Huns. ' We are reduced ', complains Salvian, ' to putting our hope in the Huns ' (VII, 39). And these bands enlisted for the Empire were sometimes as formidable as the enemy ; they plundered the provinces they were defending just as if it were enemy country. It was Gainas who ravaged Asia and Thrace, Alaric who sacked all the Illyrian towns ; and one realizes the full meaning of Salvian's lament : ' The soldiers' life is entirely spent in pillage ' (III, 50).

The empire was badly governed too. There was no lack of laws to restrain the exactions of officials, but they were ineffective. Corruption was rife from top to bottom, the highest ranks providing the model. ' What are those high offices but robbery ? Certain men whose names I suppress—do not they convert their terms of office into a snatch-and-grab raid ? The greatest robbers of the poor are those set in authority over them ! ' (IV, 21). The history of Andronicus, the governor of the

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Pentapolis who had to be excommunicated by Synesius, bishop of Cyrene, provides an apt illustration of this passage.

Such conduct is explained, if not excused, by the venality of all offices. At the bottom of the ladder the *officiales* bought their jobs and used the influence thus acquired to recover their costs. The high officials had either to obtain the goodwill of the emperor and his favourites, or provide the masses with feasts and sport ; and in order not to lose all they had, they oppressed those under them so as to get back at least the interest on their outlay. 'A few men buy honours, but only at the expense of universal ruin. Could there be anything more dishonourable or wicked ? The poor do not buy honours but they have to pay for them ; they take no part in the transaction but have to foot the bill ; to advertise a few names, the world must be upset, and the affairs of a single individual are allowed to wreck society' (IV, 21). Honest administrators had not entirely disappeared, it is true ; but we should not forget that even under Trajan bad governors were to be found in the empire. Now that the central authority had to expend all its force in struggling against the barbarians is it surprising that vigilance was relaxed, and that administrators, sure of impunity in the growing chaos, abused their power ?

Finally this ill-protected and ill-governed empire had tremendous need of money. Expenses increased in direct proportion to the growth of luxury in the two courts, and of the hosts of officials. Above all the barbarians had to be paid not to attack the frontiers or else to remain quiet in the provinces assigned to them. The presents formerly distributed by the emperors to the German chieftains bordering on the empire had now become a regular tribute. 'The old Romans made themselves feared, but *we* are afraid ; the barbarians paid tribute to them, but it is *we* who now pay the barbarians. The enemy charges us even for the daylight ; we have to pay even for life itself. What a fate is ours ! To what a state have we been reduced ! And we still have to render thanks to the barbarians from whom we have purchased our very existence' (VI, 98). And again : 'The gold we pay over to them we call a voluntary gift. We say that it is a present when it is really the price of our ransom, of our condition—a cruel and wretched one indeed' (VI, 99). The time was past when the Treasury was so rich that it could make grants to towns and individuals. Today it was really hard up : 'Where is the old wealth of Rome ? . . . The exchequer is poverty-stricken, and the Treasury reduced to beggary, so much so that we have lost the right of useless and frivolous expenditure' (VI, 43).

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Thus army, administration and money were all exhausted. But Salvian was alarmed by yet another disquieting symptom, less obvious but more formidable—the economic conditions.

To begin with the population was decreasing. Successive waves of invasion, especially at the beginning of the fifth century, had turned huge regions into desert. In the third century, it seems, the barbarians looted chiefly the harvests and herds; but in the fifth they resorted to massacre on the grand scale. 'Where has not blood flowed? Where is the ground but heaped up with corpses? Where cannot quivering torn limbs be seen? Everywhere the sight of captured cities, the horror of captivity, the shadow of death' (vi, 89). I mistrust this echo of Virgil¹ rounding off the paragraph so nicely, but the facts are none the less well established. There were many deaths—more than in the other invasions; and the former inhabitants had not yet been replaced by settlements of barbarians. Salvian records (vii, 53) that roving bands still wandered over Gaul, Spain and Africa, without any attachment to the soil.

But another cause of the decrease in population was the growing reluctance of the Romans to have children. I do not accept at their face value Salvian's remarks on the debauchery which, in his view, had corrupted all classes. I note merely that marriage had ceased to be a sacred institution for perpetuating the 'gens' and providing the state with soldiers and citizens. One wanted to have just enough children to prevent the patrimony from passing to another family or from being split up. 'It is a pity that if they *must* treat these women as consorts, they should not confine themselves to them as wives. But the more disgusting and detestable thing is that some who have contracted an honourable marriage then take additional consorts who are of servile station, dishonouring the holy sacrament of marriage by vulgar and disreputable cohabitation, not blushing to contract marriages with their serving women, and prostituting the dignity of a noble union with the disreputable commerce of a slave-girl. They are indeed worthy to belong to the same class as the women whom they consider as suitable mates' (iv, 26). And how strange it is to see the young Arnobius intervening in an affair of this kind, recommending patience and resignation to a young woman 'who had to endure such continual humiliations from her husband that she became at last no better than a common slave'. I do not entirely agree with those who maintain that the régime of one son or two children was universal; but I would

¹ *Plurima mortis imago. Aen. II, 369.*

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point out that in the *gens Valeria*, for instance, the young St. Melania was an only daughter and that her husband had only one brother. And at a time when Rome needed all the vigour of her stock to assimilate the barbarians, the best families allowed their blood to become impoverished, thus setting an example which the middle classes were only too quick to imitate.

Prosperity in general decreased together with the population. The civil wars and invasions had abolished security and the *pax Romana* : ‘*in omni enim ferme orbe Romano et pax et securitas non sunt*’. The most prosperous provinces had been raided or occupied by the barbarians : luxuriant Aquitaine, then Spain and lastly Africa, the granary of Rome. So Salvian can regretfully exclaim : ‘Our former prosperity has deserted us, our original resources no longer exist, we are now very poor’. The decay of agriculture in the country and of industry in the towns brought about a general collapse of trade in the West. In the second and third centuries trade has prospered throughout the Latin world. To mention Gaul only, the wine-merchants of Lyons, the watermen of the Saône and Rhône were famous. Native traders were numerous and busy on the water-ways and land routes : it was the Gaulish business men who filled the markets of Rome and Italy with cloth and salted goods. The colonies of Greeks and orientals were doubtless important ; but they were confined to a few ports like Marseilles, or to great entrepôts like Lyons. But in the fifth century Gaulish traders were unknown to Salvian ; had they retained any importance there would surely have been somewhere an opportunity of pillorying them. But he speaks only of Syrians. From this I conclude that trade in the West, at any rate in southern Gaul, had almost foundered during the invasions, that henceforth the orientals swallowed up all business without there being any competitors, especially at Marseilles where they were doubtless numerous and well organized. Hailing from provinces that had escaped the scourge of the barbarians, they had kept intact their capital and stock-in-trade, and being unscrupulous men of business they seized the chance of exploiting the West where they had no competitors to fear. ‘Just look at the hordes of Syrian merchants occupying most of the towns ! Their whole time is spent in devising trickeries and in telling lies. Words have no meaning for them unless they bring profit to the speaker. So great is their respect for God’s law forbidding oaths that they regard perjury as peculiarly profitable’ (iv, 69). Perhaps the old anti-Semitic hatred peeps out here. But all the same the economically enfeebled Western

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Empire was a splendid prize for the business men of Antioch or Alexandria ; one can imagine how readily they seized the opportunity of breaking up many fortunes that were already compromised, of squeezing out what little money remained in the country, and substituting a merciless exploitation for the normal system of profit and exchange.

Finally, and it is here that Salvian was most clear-sighted, this economic malady was complicated by a social crisis.

In an empire already so enfeebled as this, the Romans should have built a united front against the enemy, as they did in the time of the Punic Wars. But class warfare paralysed resistance ; there was no unity even amongst the aristocracy, whose wealth and control of the administration conferred on it the moral leadership of the State. The aristocracy stood to lose most by a victory of the barbarians : at this time when real men were not to be found, it is quite painful to watch the leaders engaged in mutual destruction. When Salvian says that every gentleman (*tous les nobles*) is guilty of homicide, at least in thought, I demur. But we must not forget that Stilicho was murdered at the instigation of the courtesans of Honorius, that it was the intrigues of Aetius which destroyed Count Boniface, and that Valentinian III had Aetius assassinated and was then himself assassinated by Maximus ; and we must admit that there was a measure of truth in Salvian's words : ' All those barbarians ', he said, ' who belong to the same race and live under the same king, are at peace with each other. But the Romans are all embittered against each other ; who is there amongst them that is not jealous of his fellow-citizens ? ' (v, 15). It was these jealousies that brought about palace revolutions, the murders which deprived the empire of its bravest protectors, and the betrayals which opened the way to the barbarians. Was it not Count Boniface himself who invited the barbarians into Africa ?

If the ruling class was divided, so too were the others. The masses were oppressed by the gentry, particularly in respect of taxation. The imposition and collection of taxes were sources of the greatest social injustice, and eventually brought about the enslavement of the middle and lower classes by the gentry.

Salvian says that taxes, instead of being imposed with the consent of the taxpayers, were arbitrarily fixed by the emperor's ministers. ' Two or three persons pass a law which will bring death to many ; a few men in power decide what the unfortunate masses shall pay ' (v, 33). Yet another act of injustice was added to the first ; the high

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officials and big landowners took advantage of their position and wealth to bribe the Treasury officials and thus almost completely evaded the payment of taxes. The 'little men' who had neither enough credit nor any other means of obtaining such favours paid their share in full, nay more, they paid over again for the rich, for the Treasury had to recover from one source what it lost from the other. 'The poor are crippled by payments which should be exacted from the rich; the weakest bear the burden of the strong' (v, 28). This particular grievance must have made a strong impression upon Salvian, for he frequently returns to it. 'How can one describe such robbery and crime!' he says; 'at a time when the Roman Empire is dead, or, in those parts which appear to be alive, expiring, when it has been strangled by taxation as if murdered by bandits—at such a time do most rich people pass on to the poor the payment of their taxes!' (iv, 30)

The 'little men' had no share in the distribution of taxation; still less were they allowed a voice in discussion or appeals. It made no difference whether it was a question of ordinary taxation or of the special levies made necessary by the wars. One class made the decision, the other was good only for paying. 'The poor pay for all, but they do not know in the least what the tax is for nor its assessment. Who is allowed to inquire into the reason for payment, or to verify the amount due from him?' (v, 32). And Salvian charges the emperor's court with increasing taxation unreasonably: 'The big men decide upon increases which only the poor are obliged to pay' (v, 29).

One might well suppose that officials in the capitals, ill-informed of conditions in the provinces, did not appreciate the ills of their fellow countrymen. But the senators who lived on their own estates behaved in precisely the same way. They too tried to economize and thrust upon the 'little men' the costs of banquets and receptions. When the retinue of a prince came with some message for these great persons, they voted extraordinary honours. But who paid the cost of entertaining these guests? Not the gentlefolk who started the performance but the 'little men' of the town. 'The big men are not touched at all by the expenditure they decree' (v, 17).

Below the senators were the Curiales of towns and municipalities—a little aristocracy modelled on the big one. Theirs was the thankless task of apportioning and collecting the taxes. No doubt they often had bad debts, for defaulters, whether such deliberately or of necessity, were not uncommon. Moreover the *exactores* nominated by the Curia readily adopted the forcible measures which the public authority

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allowed them for the purpose of opening the purses of recalcitrant taxpayers. This was quite enough to arouse vehement protests, sometimes justified by an abuse of authority. ' So many *Curiales*, so many tyrants ', says Salvian laconically (v, 18).

On the other hand, those Senators and *Curiales* who abused their power and thrust off their burdens upon the backs of the lower classes, conspired to hold up concessions *en route* and to confiscate them for their own profit. ' If sometimes, as occurred recently, the government wishes to relieve exhausted cities, or to lighten the weight of taxation, the rich at once share up amongst themselves alone the benefits of the decree, and none thinks of the poor ' (v, 35). The procedure was quite simple ; they postponed from day to day the payment of their taxes ; the tax-collectors did not dare to press them for fear of their influence at court and with the governor ; and when the emperor issued his amnesty for all taxes not yet raised, they found themselves free ; whereas the ' little men ' who had had to pay on the nail derived no benefit from the measure. Plainly this did not always happen. People like Symmachus paid their taxes punctually and without a word of complaint, when the emperor needed money for his troops. But is it rash to suppose that the loyalty of many rich people stopped short at their purse ?

Yet strictly speaking none of these ailments was mortal. In spite of wars the provinces rose quickly from their ruins. (Aquitaine, for instance, so often overrun since 406, was still like a paradise according to Salvian's own evidence (vii, 8). If soldiers were hard to find within the empire, the barbarians willingly fought for it, and the victories of Stilicho and Aetius added new lustre to the pages of Rome's military history. The administrative machine did function, efficiently or otherwise ; and in short, if we look in vain for a Verres, we do find several uncorrupt governors. Barbarian settlers took the place of the former inhabitants in the devastated regions. As for finance, the Empire of the East was to show that a State can live from hand to mouth for centuries—and not ingloriously. And last of all, even in its darkest hours old Rome always produced remarkable men, Romans by birth or adoption such as Stilicho, Constantius, Aetius, Majorian. Nevertheless class warfare was responsible for the creation of two distinct groups of population in the empire ; on the one side the rich and privileged gentry and on the other the ' *humiliores* ', the ' *tenuiores* ', who were being gradually deprived of all their freedom ; and that was a very serious state of affairs.

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The chief merit of Salvian, I consider, is that he recognized quite clearly the disappearance both of that primitive equality which restrained all beneath the emperor's sway, and also of that middle class which the emperors had tried to restore ; and that he saw the heavy hand of the big man upon the little, at the expense of the authority of the State. It was the middle classes which suffered most from civil and foreign wars. Small proprietors who had not enough capital often found themselves faced with ruin. The rich took advantage of their influence and money to buy up cheap those properties whose owners were embarrassed. By force or fraud they seized the land they had held as surety for a loan made at an extortionate rate of interest ; and they extended their ' latifundia ' without anyone, even the courts of governors, daring to oppose their abuse of power. It was a repetition throughout the empire of precisely the same phenomenon as that which, in the last centuries of the republic, had ruined the free peasantry of Italy. ' A short time ago ', narrates Salvian, ' yielding to the entreaties of a poor man, I went and begged one of the big men not to deprive an unfortunate person in dire straits of his fortune and all his possessions, not to take possession of his last resources, of the last support left him in his poverty. But the big man, consumed by avarice and inflamed by a fierce desire, already devouring his prey in anticipation, cast black looks at me, as if he thought that I might deprive him of what he had not succeeded in taking from that other, and replied that it was impossible for him to do what I asked [since he was acting in accordance with a sacred command or decree that he simply could not overlook. When I asked the reason, he said most emphatically, brooking no contradiction : " I have made a vow to seize that man's property. Consider then whether I could or should fail to accomplish what I have sworn by the name of Christ "]. Then I left him, having heard the reason for his most pious crime ; for what else could I do, when his action was shown to be so just and sacred ! ']² (IV, 74-75).

There were cases of resistance. These small holders, ruined and despoiled both by the government and by their powerful neighbours, made up their minds that the honour of Roman citizenship could be paid for too highly, and that it was desirable rather to change a social system that pressed so hardly upon them. Accordingly they did not hesitate to take refuge amongst the barbarians, in order to escape oppression. ' To them the enemy is kinder than is the tax-collector ; they go

² I have completed the story, adding, in square brackets, the conclusion, based upon Eva M. Sanford's translation (Columbia Univ. Press, 1930, 125).

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over to the enemy to escape from the violence of the treasury'. Formerly the roads were thronged with refugees, fleeing before an invasion; now on the other hand 'not only are our comrades unwilling to return to us from the barbarians, but they even leave us to take refuge with them'. Nevertheless I fancy these cases must have been quite exceptional; nowhere do we hear of mass migrations from still Roman provinces to the barbarians; moreover the serfs who rejoined Gainas or Alaric were impelled by the same motives as the slaves who found their way into the legions of Pompey. But it was an alarming symptom, for it proved that patriotism was weakening, and above all it was to be observed amongst the leisured classes as well as amongst the poor, amongst those of sufficient culture to appreciate the advantages of Latin civilization. These 'petits bourgeois', not rich enough to influence those in authority, nor yet poor enough to be overlooked, but sufficiently intelligent soon to grow tired of oppression, accepted the rule of barbarian 'reguli', amongst whom the inquisition of the Treasury was no longer to be feared. 'They sought amongst the barbarians the comforts of Roman civilization, for they could no longer put up with the inhuman barbarity of the Romans'.

I do not suggest that the barbarians were gladly welcomed everywhere, nor that they treated the Roman inhabitants kindly. Salvian himself does not hold them up as paragons of virtue: 'The Goths are treacherous, the Franks liars, the Saxons cruel' (vii, 64); more than that he adds that it involved no slight sacrifice to live side by side with people whose ways were so different, whose language was so uncouth, and whose bodies and clothes smelt so unpleasant. However, one took them as they were, and after the first shock of contact one got used to them, more than one did to the tax-collectors; one left the 'City of Rome' without undue regret. These refugees from the empire 'preferred a free life under the semblance of captivity to a captivity which masqueraded as freedom. Accordingly that name of Roman citizen, once so famous and costly, is now shunned and repudiated, a common and almost a hateful thing' (v, 22). Perhaps the empire's mortal wound was in fact the discovery that one could live outside it, that the barbarians allowed their subjects to enjoy a certain freedom, that they respected the language, customs and habits of an earlier epoch—the essentials in short of Latin civilization.

However it was only a minority which thus passed over to the barbarians. In spite of everything the subjects of the empire retained a sort of national pride; rich or poor, they loathed all barbarians,

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whether pagan or Arian. But many of them tried without leaving the State to throw off oppression by means of revolt. The Bagaudae, as they were called, were peasants exasperated by misery and threatened with loss of their liberty. 'We call them rebels; we have driven them to crime. What is it that has created the Bagaudae if not our own iniquities, if not the dishonesty of the rulers, their decrees of outlawry, and the exactions of men who have turned the collection of taxes into a regular source of private income and have plundered the Treasury' (v, 24, 25). The Bagaudae were joined by escaped slaves and by the discontented of all classes; they formed bands of brigands who looted and massacred the rich and the officials. It was not easy to suppress them, for they could count on many sympathizers amongst the people; those who had not the courage to join them gave them secret support. To oppose these peasant bands it was necessary to send for the generals and armies which were so sorely needed at the front.

But these revolts still remained exceptional. The masses of the population resigned themselves to their fate and passed by slow stages into the ranks of the gentlefolks' retainers. The gradual disappearance of the small freeholders who were absorbed by the estates of the big landowners—this was for Salvian the most obvious proof of the collapse of the empire. All these individuals, oppressed and abandoned by the State, sought refuge under the patronage of the rich; they formed most of the recruits of the class of 'coloni'.

Salvian draws a clear distinction between two classes of 'coloni'. There were first those who had lost all their fortune. To pay their debts, and more often their arrears of taxation, they had had to sell their possessions, or else the tax-collectors had seized their land and movable property. No doubt the proceeds of the sale had sufficed to extinguish their debt, for they had remained at liberty. But, driven thus from their inheritance, without resources, these peasants had hired themselves out to their neighbour, the big landowner. He had not hesitated to take these free workers into his service; were they not once farmers and therefore experienced? once landowners and therefore attached to the land, if given a firm footing there? He exacted a rent from them and gave them leave to exploit a few acres of his vast possessions, granting a lease for a more or less lengthy term of years. And here we have these former farmers, once their own masters, now become tenants of the rich, farming land which is not theirs, subjected to the payment of dues. Doubtless the landlords undertook not to give them notice, nor to sell the land without agreeing to let them remain on it. But by the same contract

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they were tied to the land. They could not leave it, nor could their children who came after them ; they had alienated their freedom.

The condition of others was less desperate. They had not waited to become impoverished serfs. They had never allowed themselves to accept calmly the prospect of eviction. With the object of evading simultaneously both the encroachments of the rich and the attentions of the Treasury, they placed themselves immediately under the protection of one of the 'maiores' of the country, and became, so to speak, his 'dediticii'. Thereby, while submitting to the superintendence of a master and making over to him the ownership of their property, they at least retained its usufruct for life, and were assured of not being evicted, since the emperors forbade the tax-collectors to alienate the 'coloni' from their land even if they were in debt to the State. Becoming thus clients of the rich, they still continued to farm their land, to which they thus became attached ; and instead of the land-tax which now became payable by their landlord, the legal proprietor, they had nothing to pay but his rent and the State poll-tax. Nevertheless the result was the same in either case—the absorption of small estates in the large ones. The sons of the 'coloni', in the second and third generation, in spite of legal protection, often lost the enjoyment of the family acres, and became in fact something not far removed from feudal (*corvéables*) serfs at the mercy of the landowner. 'Those whom he welcomed as independent strangers he now begins to look upon as his own men ; those who are free he converts into slaves' (v, 45). The law took great care to draw a distinction between *colonus* and slave ; but in actual fact the difference between a servile and colonial tenure was eventually lost in the common subjection of both classes to their master.³ The latter exacted precisely the same services from each, and neither had any redress. 'This law appears to protect the poor, but it despoils them ; the big men protect the less fortunate ones, but this protection increases their misfortune. That the fathers may obtain it, it is necessary for the sons to lose their inheritance' (v, 37). After the death of their father the children, in consequence of this legal position, no longer possess their little farm and are exhausted by the performance of feudal services'—*corvées agricoles*.

Thus one watches the formation of two strata of population. On the top is the landowner, the lord one might almost call him now, below is the mass of half-free serfs, liable to arbitrary forced services.

³ It required continual intervention on the part of the emperors to prevent the landowners from arbitrarily evicting the *colonus* from his estate. Cod. Theod., XIII, 10, 13.

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The peasants who parted with their liberty escape the direct rule of the State only to fall into the hands of an individual ; it is the beginning of the Middle Ages and feudalism.

I will not deny that this picture may be very incomplete ; and it must be admitted that Salvian's book suggests these ideas rather than states them coherently. Salvian refers neither to the bad organization of the central authority in the empire, nor to the difficulties which were encountered in the execution of that authority. It is strange, too, that the invasions do not greatly shock him and that he makes no serious attempt to account for them.

In conclusion I should like to show that Salvian, for all his tirades against Roman society and the praises he bestows somewhat too lavishly upon the barbarians, remained at heart passionately Roman. Roman he was not only by speech and education but also in his prejudices. He regards slavery as necessary, for example, and looks upon all slaves as necessarily corrupt. But it was perhaps, above all, because he realized the material causes of the fall of the empire, that he kept in his heart a real love for the *Res Romana* and was bitterly grieved by its collapse. He was saturated with memories of Ancient Rome, its glories and virtues. He recalled with regret the Fabii, Fabricii, Cincinnati who despised wealth but served the State disinterestedly. ' The magistrates were poor in those days, but they made the Republic wealthy ' (I, 10). And it was in moving terms that he recounted the long period of prosperity which the empire had enjoyed. ' The Roman world, like a well-developed body, had healthy members ; the public granaries became too small, so universal was the abundance. The citizens of all the towns saw riches and treasure flowing in towards them. The authority of religion could hardly restrain the relaxation of morals. No one considered the cost of the games to the State, for the expense to each was negligible. The Republic looked round to see where it might sustain a loss, for it no longer knew what to do with its resources '. To me the refrain of these regrets seems more sincere than the anathemas broadcast elsewhere by Salvian. They are those same regrets one finds voiced by all the Roman clergy, by Latins like Saint Jerome or Saint Augustine, and by Hellenes like Synesius of Cyrene. They show in any case that it was only with grief and despair that, on the eve of the last invasions, the people of the time admitted the ruin of the Roman world.

The translator is indebted to Mr C. E. Stevens for kindly checking quotations with the original Latin and for adding references to them.

Notes and News

LONG MEG (PLATES I-II)

The stone circle called Long Meg and her Daughters, in the parish of Little Salkeld, Cumberland, is well known to most students of British archaeology. It is one of the major monuments of its kind in Britain, and one of the most perfect. The present note, however, is concerned not with Long Meg, but with another circle, now destroyed, whose site can be recovered to within a few yards; and not so much with the circle itself, evidently a minor monument of no great outstanding interest, as with the method by which its position was determined.

The one and only reference in literature to the second circle is contained in Stukeley's *Iter Boreale (Itinerarium Curiosum*, II, 1776, p. 47). Describing Long Meg, he says: — 'Full southwest from this work, in the next inclosure and higher ground is another circle of lesser stones, in number 20: the circle is 50 foot diameter; and at some distance above it is another stone placed regarding it, as Meg does the larger circle'. This second, smaller, circle is shown in his 'View of the Celtic Temple called Long Meg, Aug. 16 1725'. A photographic copy of this was made at the Ordnance Survey about ten years ago, and is reproduced here (PLATE I), together with a photograph taken by the writer from exactly the same spot on 20 May 1934, under very unfavourable climatic conditions. Now it will be observed that immediately behind (to the left of) the horseman in the foreground of Stukeley's drawing there are three stones of the circle, the third (left-most) being the tallest. In the photograph these are the three on the right-hand side, the tallest being that in the middle of the picture. Directly above this on Stukeley's drawing is the missing circle; directly above it on the photograph there can just be distinguished the roof of an outlying farm-building. This latter, in all probability, marks the site where the circle formerly stood. The direction has been proved to be correct, and it agrees also in being on slightly higher ground. Beyond (sw of) these farm-buildings the ground soon begins to fall and anything situated there would be invisible from Stukeley's viewpoint. It seems likely that the stones composing the circle were used

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up to construct either the farm-building or the adjacent ' dykes ' (dry stone walls). Perhaps local investigations might throw light on this point. It is quite possible that the stones might, like Long Meg herself and those of the third and still surviving (Maughanby) circle to the NW, have had cup-and-ring engravings ; and that a close examination of the larger stones in the dykes might be worth while.

These facts were only ascertained by a close inspection of the ground with the photographic copy of Stukeley's drawing in hand for constant reference. By this method it was possible to plot on the 6-inch Ordnance map the approximate position of the lost circle. This could not have been done with the map only, without field-work. There is nothing on the map to enable one to identify the position of individual stones in the circle ; and the exact limits of visibility are always uncertain.

I used the same method at Avebury with equally good results, and would recommend it to others who wish to make discoveries. Stukeley was a faithful recorder of facts and much has vanished since his day.

O.G.S.C.

PREHISTORIC ARCHAEOLOGY IN NORTHERN IRELAND

Recent years have witnessed a considerable revival and expansion of interest in the prehistoric cultures of northeastern Ireland, whose rich flint industries have too long been regarded as a hunting ground for private collections and museums. In 1932 the Belfast Natural History and Philosophical Society organized the excavation of a chambered horned cairn at Goward, co. Down (ANTIQUITY, June 1933, p. 122) with the object of training students of Queen's University, Belfast, in modern methods of investigation. In 1933, as a result of recommendations from local archaeologists inspired by attending the meeting of the International Congress of Prehistoric and Protohistoric Sciences (London, 1932) the Belfast Corporation, through the Museum and Art Galleries Committee, made a grant of £50 in aid of prehistoric research in Northern Ireland. The grant has since been renewed for 1934 : it is administered by the Belfast Municipal Museum in co-operation with an advisory research council ; and the grant is open, under certain conditions, to all accredited archaeologists.

Already definite results have been achieved in several fields of research. During 1933 important finds of the Early Iron Age, including a female clay figurine, were made by Dr Wilfrid Jackson in chalk caves

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at Ballintoy, on the north coast of co. Antrim (*Antiq. Journ.* April 1934, p. 180) while a horned cairn at Ballyalton, co. Down, excavated by O. Davies and E. E. Evans, yielded a wealth of flint tools and types of neolithic pottery new to Ireland (*Man*, June 1934, 111). Mr Davies also examined a megalithic monument at Largalinn, co. Fermanagh, which he describes as being partially rock-cut and having a small paved forecourt.

Dr Jackson continued his work at Ballintoy in June 1934, and Messrs Davies and Evans investigated a single-chambered grave at Clonlum, co. Armagh, and also a horned cairn on Browndod Hill, co. Antrim. Miss Gaffikin has excavated a hut site in a rath near Saintfield, co. Down and has obtained interesting information on the structural lay-out of the fort itself. Mr Blake Whelan is pursuing his work on the Mesolithic industries with results that promise to be of the greatest value. Attention is also being given to sand-hill and raised beach settlements in the hope of finding direct stratigraphical evidence of the culture sequence in the north of Ireland.

It is hoped that work on these and other sites ranging from the Mesolithic to the Early Iron Age will be continued in 1935. The chief finds will be exhibited at the Belfast Museum, and full reports will appear in the Irish Journals from time to time. It is clear that the close relations long existing between northeastern Ireland and western Britain give this corner of the country special significance as a cultural gateway, and new light must be thrown on many problems of culture-diffusion between the two islands. It may be added that as a result of the work outlined above a new interest in antiquity is stirring in many parts of the countryside, and discoveries of value are being reported to the authorities with more frequency than in the past. Miss Gaffikin's important work on the Inventory of Ancient Monuments in Northern Ireland also benefits from the widespread interest the excavations have aroused.

E. E. EVANS.

THE ERUPTION OF VESUVIUS, A.D. 79 (PLATES III-IV)

The stratification of the volcanic matter that was thrown up by Vesuvius in the famous eruption of 24-25 August, A.D. 79, is at present clearly discernible near the so-called 'Villa of the Mysteries' at Pompeii. It is possible, even without any technical knowledge of volcanology, to learn from Mr Crawford's photographs (PLATES III-IV) something about the sequence of events on those two days and to bring the evidence of

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the strata into line with the eyewitness' account of the eruption which is preserved in the letters of the Younger Pliny.

The eruption started on 24 August and lasted till the next day. Pliny's description is found in two well-known letters addressed to Tacitus, one (vi, 16) describing the events which led up to the death of his uncle at Stabiae and covering the day of 24 August and the night of 24-25 August, the other (vi, 20) giving his own experiences at Misenum during the night of 24-25 August and the day of 25 August. The letters thus give, and were designed to give, a complete account of the whole eruption. The various phases, so far as they can be gathered from Pliny, are as follows :—

(1) During the afternoon of 24 August a cloud of unusual shape and size appeared issuing from Vesuvius. Pliny likened it to a pine—a simile whose aptness is immediately striking to all who have seen Vesuvius in eruption.

(2) As the Elder Pliny approached the volcano by sea, hot ashes and pumice-stone fell on the ship, and during the night of 24-25 August, which he spent at Stabiae, the ashes and pumice fell to such a depth outside his bedroom door that he had to be wakened for fear that his escape would be cut off.

(3) Late in the night, the fall of ash and pumice abated somewhat, but violent earthquake shocks were felt which endangered the stability of the villa at Stabiae where the Elder Pliny was. The same shocks were felt by the Younger Pliny at Misenum, and, indeed, were so violent that carts would not remain still, though loaded with stones.

(4) Early on 25 August, a black cloud descended to earth and with it came a renewal of the falling ash (pumice is not mentioned on this occasion). Later in the day, the cloud disappeared, and when light returned, everything at Misenum was found to be covered with ash.

We turn from the evidence of the pen to that of the spade. Mr Crawford's photographs show, starting from the bottom, the following main strata :—

(A) A layer of dark volcanic ash, speckled with white pumice-stones about the size of walnuts. This layer, of which only the top portion is visible in the photographs, varies from 8 to 10 feet in depth.

(B) A layer of grey volcanic ash (about 6 or 7 feet in depth), comparatively free from pumice-stones.

(C) A number of narrow strata, composed of various kinds of volcanic matter, and covering, in all, a depth of 2 or 3 feet.

If we equate these strata with the phases of the eruption described

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by Pliny, we readily see that stratum A corresponds to phase 2 and stratum B to phase 4. At Pompeii the upper parts of some buildings, which had remained standing during the shower of ash and pumice (stratum A), fell during the later rain of ash (stratum B) and have been found 10 feet above the original ground level. It seems reasonable to suppose that these fallen buildings were thrown down by the earthquake shocks of Pliny's third phase.

We may thus reconstruct the course of events. The ash and pumice was erupted to a great height, forming a pine-shaped cloud. The pumice and heavier dust fell first and rained down to a depth of 8 or 10 feet over Pompeii, the valley of the Sarno, and the adjoining portion of the Bay of Naples (striking Pliny's ship, and also forming stratum A). The lighter ash, reinforced probably by further eruptions, hung about longer in the air, and some of it was carried by the wind for a considerable way—even as far as Misenum (eyewitnesses state that in the eruption of 1906 ash was carried in the same way as far as Capri, which is about the same distance as Misenum from the volcano). While it was descending (stratum B), the earthquake shocks were violent enough to throw down walls which still protruded above the lapilli and ash of stratum A.

What of the narrow strata at the top (see PLATES, and C, above) composed of alternate layers of ash and pumice, to which there is nothing corresponding in Pliny's account? It is most likely that they represent a local phenomenon—showers of lapilli which fell late on 25 August when the force of the eruption was already diminishing—and that they find no place in Pliny's account simply because, being heavy, they did not reach to Misenum where he was.

R. C. CARRINGTON.

HUMAN SACRIFICE IN ANTIQUITY

The Rev. MICHAEL ADLER writes from the Central Synagogue :—

' May I be allowed to enter a most emphatic protest against the statement of your contributor in the June number¹ to the effect that human sacrifices were "quite common" among the Jews in Bible times and that there was "divine authority" for this foul practice. These assertions reveal a complete misunderstanding both of the text of Scripture and of the spirit of the Mosaic laws.

¹ ANTIQUITY, June 1934, p. 225.—EDITOR.

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‘ The teaching of the lawgiver of Israel upon this subject is definitely set forth in several passages in the Bible. “ And thou shalt not give any of thy seed to set them apart to Molech, neither shalt thou profane the name of thy God : I am the Lord . . . for all these abominations have the men of the land done, that were before you and the land was defiled . . . Therefore shall ye keep my charge that ye do not any of these abominable customs which were done before you, and that ye defile not yourselves therein : I am the Lord your God ”.’ (LEVITICUS, XVIII, 21, 27, 30). Again in DEUTERONOMY, XII, 31, “ Thou shalt not do so unto the Lord thy God : for every abomination to the Lord, which he hateth, have they done unto their gods : for even their sons and their daughters do they burn in the fire to their gods ”.

‘ These injunctions make it perfectly clear that in no place can evidence be found to show that “ divine authority ” was given to this abominable usage of the heathen. Occasional disobedience to the Law of God only emphasizes the utter repulsion with which human sacrifice was regarded by the people of Israel. The Prophets likewise shudder at this hideous aberration of men’s sense of worship and denounce it in unmeasured terms. It is due to the prophetic teaching that the name GE HINNOM, the valley where the wicked kings practised this horrible rite, became a synonym for “ Hell ”.

‘ Your contributor supports his views by quoting LEVITICUS, XXVII, 28, 29 as the source of the “ divine authority ” for the custom. It is only by a perverse rendering of the text that such an utterly false declaration can be possible. The passage in LEVITICUS has no connection whatever with the idea of human sacrifice but speaks of the *Cherem* or devoted thing or ban. There were three varieties of the ban, of differing degrees of stringency, (—for full details, see Chief Rabbi, Dr Hertz, Commentary, *i.e.*)—“ The reference here is to the justice-ban : in other words, to the judicial sentence by the proper authorities on such malefactors as the idolater and the blasphemer ” (Kennedy, *i.e.*).

‘ It is a most reprehensible procedure to misinterpret Biblical texts in order to support erroneous opinions—and more especially at the present time when so many vile accusations are being levelled against the Jewish people by those who seek to do them harm ’.

The passage in question was written by the Editor, and arose out

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of a reference to a possible (but doubtful) survival of human sacrifice in Celtic lands down into Christian times. So far from wishing to do harm to the Jewish people I wished rather to show that the rite of human sacrifice was once practised by *many* peoples who are now civilized, including the former inhabitants of these islands. Mr Adler unknowingly attributes to me motives which I was very far from having ; I do not belong to the camp of the anti-Semites. I can see now, however, that the passage to which Mr Adler objects might quite reasonably be misinterpreted as evidence of anti-Semitism, and I regret therefore that I did not forestall any possibility of any such misinterpretation by a definite statement of impartiality.

I submit, however, that the passage most complained of (LEVITICUS, XXVII, 28, 29), though it may be explained away by the learned, *does* convey to the ordinary reader the impression that human sacrifice was divinely authorized. Here it is, so that readers may judge for themselves :—‘ Notwithstanding no devoted thing, that a man shall devote unto the Lord of all that he hath, *both of man and beast*, and of the field of his possession, shall be sold or redeemed : every devoted thing is most holy unto the Lord. None devoted, which shall be devoted of men, shall be redeemed ; but *shall surely be put to death*’ (our italics).

Mr Adler does not refer to the story of Jephthah’s daughter, which is a clear case of human sacrifice, belonging to a ritual pattern common in the East, though doubtless far older than Israel’s occupation of Palestine. The point is that this story is told without comment.

I am also accused of misunderstanding the ‘ spirit of the Mosaic laws’. To me, and I think to most people, those laws are utterly repugnant. Let me quote from a recent writer on the subject,² who describes the Babylonian origin of the Pentateuch.

‘ . . . The additions [to the Code of Hammurabi] of the Hebrew legislators were almost untirely of a theological character. The basic ideas of the Hammurabi Code are civil right and solid justice ; and, considering the times and the circumstances, these are very well realized by the Code. The king makes much of his devotion to the gods and the blessings they have bestowed upon him ; but theology is rigidly excluded from the Code itself . . . In the Pentateuch, on the other hand, the theological interest is paramount. The principle of religious persecution is introduced from the very first, being inculcated even in the Book of

² Chilperic Edwards, *The World’s Earliest Laws* (*The Thinker’s Library*, No. 43), Watts, 1934, pp. 132 ff.

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the Covenant ; whereas religious persecution was entirely unknown in Babylonia, not only in the Code of Hammurabi, but throughout the whole range of cuneiform literature, as far as we are acquainted with it at present. NUMBERS, XXXI, 17-24, is a typical instance of the ideal Pentateuchal combination of bloodthirstiness and ceremonial zeal ; and one of the objects of the completed Torah is the establishment of a theological reign of terror. The same penalty is prescribed for petty infractions of ritual as for the gravest crimes ; and the *Priests' Code* is a wearisome liturgy of " that soul shall be cut off from his people ". Unauthorized compounding of oil or incense is punishable with death (EXODUS, XXX, 33, 38), so is neglect of the Passover (NUMBERS, IX, 13), Sabbath-breaking (EXODUS, XXXV, 2), or even doing " aught with an high hand " (NUMBERS, XV, 30). The fierce and senseless intolerance of the Laws of Moses forms a significant contrast to the judicial dignity of the Laws of Hammurabi, which imply " a more advanced state of civilization and morality than was to be found in the kingdoms of Israel and Judah ".

I have no racial animus whatever against the Jewish people ; but I do resent having their early experiments in theocracy recited for edification, just as I object to glorifications of medieval Christian experiments in the same sphere.

In the original note it was stated that human sacrifice is now illegal in various countries where it was formerly practised, including India. That instances still occur is shown by the following report in *The Times* of 18 July, p. 13.

'The Session Judge of Bhagalpur (Bihar) has sentenced a Moslem, Sheikh Hanaf, to transportation for life for the murder of his only son, aged four, sacrificed in the name of God and the Prophet.

'In February last the man took the boy to a mosque after bathing and feeding him. There both said their prayers together, after which the man took the boy to an outer room, put him in the position in which animals are sacrificed at Bakr-Id, and cut his throat. Before the deed he kept his purpose secret. After it he stood in the mosque courtyard and shouted that he had sacrificed his son in the name of God and the Prophet, and that the Moslems should see to the funeral rites as he was now a fakir. Those who heard him found the body covered with a cloth, and handed him over to the police.

'His statement, persisted in throughout, was that he had not murdered but sacrificed (*korban kar dia*). After the earthquake he realized the powers of God, had devoted himself to prayers, had prayed for a state of *fakiri* (religious mendicancy), and heard the voice of God within him promise this if he could sacrifice his only son'.

O. G. S. CRAWFORD.

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CURRENCY-BARS AGAIN*.

Mr A. M. HOCART writes :—‘ Mr Reginald A. Smith asserts that certain bars are currency bars. Mr E. Wyndham Hulme declares they are unfinished swords (ANTIQUITY, 1933, VII, 61 and 210). Are the two views necessarily inconsistent? The Azande of the Sudan have ‘ spears which have not been beaten into weapons, but are being stored by a man as bride-wealth for his son’s marriage ’ (E. E. Evans-Pritchard in *Africa*, VI, 177). May not the ancient Britons have left swords unfinished to use for barter or ceremonial? There is, as a matter of fact, no evidence, and I only suggest this possibility to point the moral. Zoologists base their palaeontology on the study of living forms. Archaeologists still claim complete autonomy from the study of living cultures. The result is constant controversies, such as the present one, which would never arise if a study of living forms preceded that of the fossils ’.

Mr A. M. Hocart’s point is a thoroughly sound one, and one that we have emphasized over and over again, both in these columns and elsewhere. Archaeology that is not based upon some personal acquaintance with living communities in a primitive state of culture is a dry, arid, academic thing, of little value to any one except a museum curator. But the cause, in this country, has organizational roots. The gap will not be bridged so long as the societies concerned pursue a policy of rigid exclusiveness. In this, as in so much else, the late General Pitt-Rivers was the shining exemplar.

On the other hand the attention of anthropologists has, we think, been concentrated far too much upon social and religious abstractions, to the exclusion of the material culture upon which they are based.

THE NOMORI OF SIERRA LEONE (PLATES V-VII)

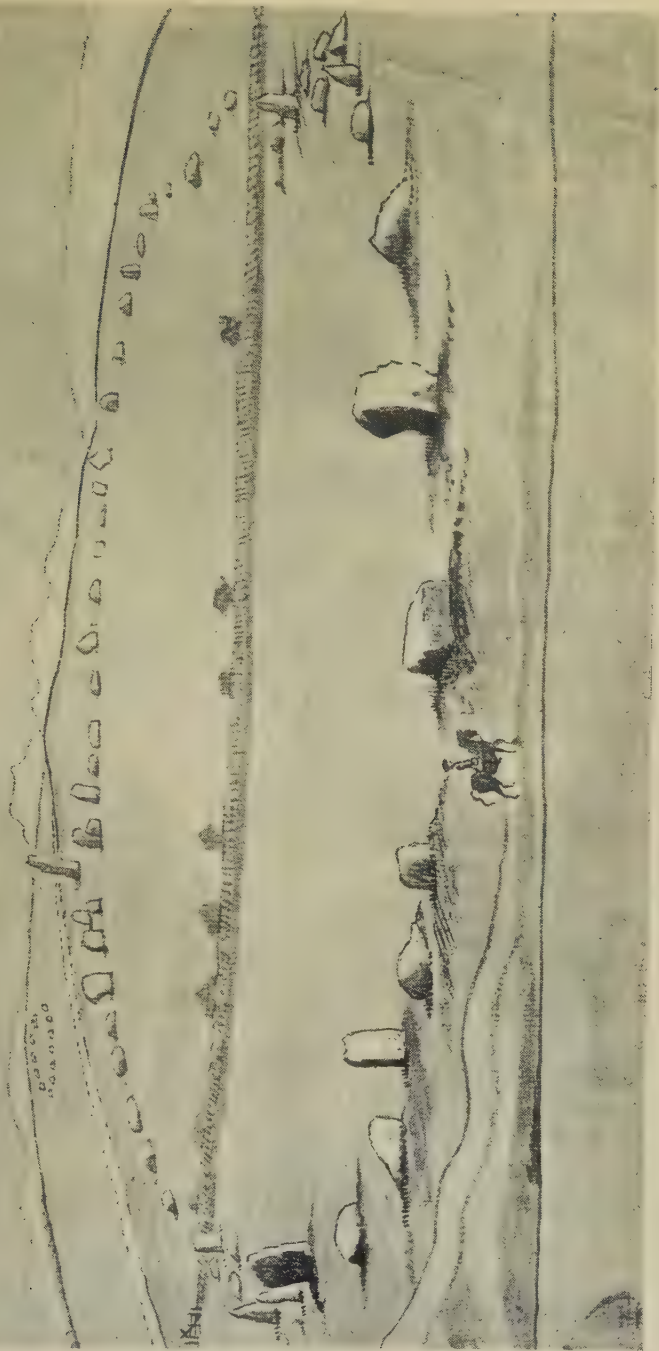
The preparation of forest and other land for agricultural purposes has, in the past, led to the discovery of the stone figures shown in the accompanying illustrations.

This type of stone sculpture is not confined to the Protectorate of Sierra Leone, specimens having been received by at least one museum on the Continent from other parts of tropical West Africa. The British Museum owns, perhaps, the most comprehensive collection in the world.

* This must be their last appearance, for the present at any rate.—EDITOR.

PLATE I

A View of the Calchi Tomple calls Long Meg Aug. 16. 1725.



STUKELEY'S VIEW OF 'LONG MEG', 16 August 1725 (See p. 328)

PLATE II



'LONG MEG', PHOTOGRAPHED FROM STUKELEY'S VIEW-POINT, 20 May 1934 (See p. 328)
Ph. O. G. S. Crawford

PLATE III



STRATIFICATION NEAR THE 'VILLA OF THE MYSTERIES', POMPEII (See p. 330)

Ph. O. G. S. Crawford

PLATE IV



STRATIFICATION NEAR THE 'VILLA OF THE MYSTERIES', POMPEII (*See* p. 330)

Ph. O. G. S. Crawford

PLATE V



STONE FIGURES, SIERRA LEONE (*See* p. 336)

PLATE VI



STONE FIGURE, SIERRA LEONE (*See* p. 337)

PLATE VII



MEDICINE MAN, WITH 'LEARNING BOY', SIERRA LEONE (*See p. 337*)

PLATE VIII



THE KENNET AVENUE, AVEBURY, LOOKING SOUTHEAST DURING EXCAVATIONS, 11 JULY 1934 (See p. 344)
Ph. O. G. S. Crawford

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Two heads in my group (PLATE V) are believed to be the largest of the kind. They are very heavy, almost life-size, and are made of steatite. One of them has a calm contemplative face turned upward, a ring adorns the nose, the moustache is refined, the ears are small, and a rope encircles the head. The nose and lips are negroid in type.

With regard to the age of these figures nothing definite is known. No light has been shed on the race of men represented by the heads produced by the hands of an unknown negro (?) sculptor.

Tribal wars in the past, disease, migration, and famine have rendered continuous and accurate mental record impossible of achievement. From their shape it may be assumed that two of the heads illustrated were carved from the stone in the side of a cave and then cut off at the neck (PLATE V). The work might be done in secret, or, possibly, the sculptor found by experience that it was easier to work in a standing position, and finding suitable material in a cave he worked on it there, the shade of the cave being preferable to the heat of a tropical sun.

My African friends have told me that the statues have been inherited by them, and in every case the figure had been found when preparing new land for farming. As to their origin and age, they know nothing. How could they? What do we know? We can but conjecture.

Nomori is the name given to the figures by the Mende people; 'Nu' or 'No' meaning a person, and 'Mori' or 'Moli' signifying to ask a question, based on the belief that as there are good and bad human beings so there are good and bad Nomoris, and one has only to ask the good or bad spirit, as the case may be, resident in the respective images for the request to be granted. Nevertheless, though the Nomori is venerated for its supernatural powers and the good luck it is supposed to bring (being placed, for example, in a rice field to assure good crops to the owner), it may also receive a sound flogging from time to time to make it steal rice plants from a neighbouring farm to plant in that of its master! Generally speaking, however, there is a firm belief in the supernatural powers of the Nomori, and the Mahen Yafe, Chiefs' Devils, are the most dreaded of all. The figure between the two heads in the group (PLATE V) is believed to be the abode of an evil spirit who will help bad men and women to be successful in whatever wickedness they may care to excel. Just another way of believing in a good God, and a malevolent Satan.

The recognized medium of approach is the 'medicine man', one of whom, with his 'learning boy', is seen in PLATE VII. Both very

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intelligent men, a not unknown characteristic of most 'medicine men'. By the way, this term does not refer to a general practitioner or a surgeon. 'Medicine' is the title given to a man or woman believed to have the power of communicating with the spirits of other worlds; they may also be 'doctors' of the body as well as of the mind.

It is interesting to note that with these fascinating examples of ancient sculpture are found bracelets of iron and brass. The iron bracelets were certainly manufactured from the iron ore of the country by the blacksmith of old. The brass ornaments may have crossed the desert from Egypt. They are also used as 'medicine'.

WILLIAM ADDISON.

THE BATTLE OF BRUNANBURH

In the year 937 Athelstan, king of England, 'inflicted a momentous defeat on the allied hosts of Danes, Irish, Galwegians, Cumbrians, Scots and Picts' at a place variously described as Brunanburh, (Aet) brunanwerch, Bruneswerce, Brunewerche, Brune, Brunandune, Brunfeld, Brunfort, Dunbrunde, Weondune, Vinheith. The site of this important battle is still unidentified; but a case has been made out for Burnswark in Ecclefechan, Dumfriesshire.¹ Dr Neilson's arguments were criticized in the same volume (pp. 431-5) by Miss Alice Law, and it is not my intention to enter the lists, for I have not had the opportunity of fully studying the evidence. I would merely say that, so far as I have read, Dr Neilson's identification at any rate seems to agree with the facts, even if some of his arguments do not stand. There is nothing against the equation of Bruneswerce with the hill of Burnswark, so far as the names go; but there is certainly not room on the top of it for a battle of the magnitude of this one. On the other hand there is, only $3\frac{1}{2}$ miles to the south, a rounded dome called Brown Moor (Dumfries 57 NE, 58 NW) which would do quite well for Weondune=Vinheith. (A farm on the western slope is called Whins, but no early forms are available and the name may not be connected). That this hill of Brown Moor had another name is shown by the name of a farm at its foot, Pennersaugh. According to Professor Watson² this was Penresax in 1194-1214 and it may be translated 'the hill of the Saxons'. The name

¹ By Dr George Neilson in the *Scottish Historical Review*. 1910, VII, 37-55.

² *Celtic Place-names of Scotland*, 356.

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occurs more than once further south,³ in one instance on the site of a battle between Saxons and Danes. Further, the hill facing Pennersaugh-Brownmoor on the southeast was evidently once called Dumbretton which name, like Dumbarton, meant the hill of the Britons.⁴ Could these names have any connexion with the battle? and could they have been given as late as the tenth century? If not they may refer to some earlier encounter in this border region which must have seen many previous engagements.

It is worth noting that the Roman road from Carlisle to the Clyde, the main west coast route, ran at the foot of both these hills on the north; that the important Roman fort of Birrens at Middlebie is only a mile from Pennersaugh Farm, and that the two hills are separated by what seems to be an old road of some importance. It unites Carruthers (=Caer Rhydderch, the citadel of the victor of Arderit, now Birrens, on the hill above Carruthers) with the fat lands of Lower Annandale, thickly studded with early sites (St. Mungo's, Hoddum, Luce, Brydekirk, Annan). Such a region was a likely one for a battle, under the primitive barbaric conditions of the early Christian era.

O.G.S.C.

MALTESE CART-RUTS

Mr E. M. P. EVANS writes (from the Transvaal):—In his article on Prehistoric cart-tracks in Malta (ANTIQUITY, 1928, II, 18) Sir Themistocles Zammit suggests (1) that some of these tracks formed themselves by use, some were cut on purpose; (2) that they were used by two-wheeled carts without tyres; and (3) the carts were drawn by men, not by animals. On the other hand Major Fisher (ANTIQUITY, 1931, V, 197) suggests that the carts were drawn by animals which walked in the wheel-ruts.

My theory (or hypothesis) is (1) that the ruts were all *cut* for the vehicles and did not merely arise from wear due to traffic; (2) that the vehicles were waggons (four-wheeled) without any means of steering, the wheels and axle being in one piece; and (3) they were undoubtedly drawn by large numbers of men with ropes.

³ Pensax, in Worcs. (left unexplained in EPNS. Worcs., 1927, p. 67; Sixpenny Handley, Dorset (Sex-pene in Domesday; see Zachrisson, *Romans and Celts*, 1927, p. 49); Sixpenny Farm, Fontmell Magna, Dorset (8 sw) (Sear pennes for Seax pennes in BCS. II, no. 691). It should be noted that the eastern boundary of Handley crosses Oakley Down, the Aclea of Asser (ed. Stevenson, 1904, pp. 6, 178), the site of the battle of 851.

⁴ Watson, p. 184 (spelt *Drumbretton* by a slip).

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1. I agree with Sir Themistocles Zammit that the tracks could not possibly have been caused by a sledge. I have made and used sledges (or 'slees' as they are called here in South Africa), of every kind : those with proper runners, both shod with iron, and unshod, and even the simplest kind (the 'Kaffir slee') made from a forked tree trunk, similar to that shown in the article on 'Assam Megaliths' plate XI.¹ When taking even the easiest curve the runner of a proper slee makes an extremely wide track, as can easily be demonstrated with a little geometrical drawing. This broadening of the track, if it existed, would have been visible in the aerial photographs printed in ANTIQUITY.

From personal experience of driving many kinds of vehicles I can affirm that one vehicle does not follow exactly the spoor of another, except when *unavoidable*, that is when the road is very constricted. Animals in pairs do not like treading in a narrow rut, while their wilfulness makes it very difficult for the vehicle to follow the exact line if the driver should so desire. In sand especially, or where ruts are deep, it makes heavy going to follow exactly the old spoor. One follows merely its general line, so causing the wide *modern* ruts noticed in Malta by Sir T. Zammit. It follows that all the ancient tracks which are narrow must have been marked out on purpose and *cut by hand*, even if deepened by subsequent use.

With what object was this done, since the friction on the sides of the rut increases the tractive force required ? Obviously it was done to keep in the right direction vehicles that could not steer themselves. The modern analogy is any railway truck, for no railway truck has any means of steering at all.

2. A cart (two-wheeled) is steered by the shafts or pole, and a waggon by the 'disselboom' (pole) which turns the front wheels, but a railway truck has to follow the rails.

It seems to be generally assumed that carts were invented before waggons. Dr Cyril Fox in his article on 'Sleds, Carts and Waggons', (ANTIQUITY, 1931, v, 185) does not touch on the origin of four-wheeled vehicles. This supposed priority of the cart is supported by the complexity of the structure of a modern waggon, showing it to be derived from the cart. A waggon consists essentially of two carts, the pole of the second being fastened to the back of the undercarriage of the first, which has no body ; while the body of the second projects forwards and is supported by the undercarriage of the first. All modern and

¹ ANTIQUITY, 1929, III, 324.

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medieval waggons seem to be built on these lines, being apparently derived from a vehicle like the 'Wagon, limbered, G.S.', used in the late war for very rough country, on the principle of the field-gun and limber.

However the discoveries at Ur have shown a respectable antiquity for the waggon, and I suggest the following origin for a type of waggon which was employed in prehistoric Malta, but which afterwards went out of use :—

The megalithic builders had discovered the principle of the roller for moving their big stones (it was known in Mesopotamia, but not used in Egypt). When they had to move heavy loads of earth, they constructed a large box of timber and moved it on rollers as they had done with the stones. The next step was to cut notches on the under-side of the box to prevent the rollers from running away, and to keep them always under the box. It was then found that two rollers were sufficient, and that the greater their diameter the better. An improvement was to reduce the diameter of the middle of the roller, where it lay under the box, to prevent the roller working out sideways. The result was a vehicle exactly the same in principle as a modern railway-truck, the wheels and axle being in one piece, and there being no means of steering, except by shifting the front of the vehicle across with handspikes. Hence the need of a 'track'.

As the truck had neither front nor back, it was not necessary to reverse it at the end of its journey, and it is noticeable that though many 'sidings' and 'passing-places' are revealed in the aerial photographs, there is no example of a loop for turning round.

3. The foot of a medium-sized horse of the 'Hackney' type is $5\frac{1}{2}$ inches wide, but its track is $9\frac{1}{2}$ inches wide. With the Shire type of horse the figures would be very much greater. A small trek-ox, just old enough to begin serious work, gave figures similar to those of the small horse, while a full-grown trek-ox of mine (not a particularly large animal) made a track 16 inches wide. I do not use donkeys, which have much smaller feet, but I venture to assert that no draught animal could walk in a deep rut, only 4 inches wide at the bottom. Even if there were room for its feet on the bottom and it could keep its feet in one line, it would 'brush', that is to say, kick itself, every time one foot tried to pass the other. Let the reader try this experiment for himself, making a 'rut' from two boards placed on the ground 4 inches apart, and himself taking the place of the draught animal.

Furthermore, it would take more than one yoke of animals to pull

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a useful load up the steep hills of Malta. Now, at a bend, the leaders would 'swing wide', making a big circle, each succeeding pair making a smaller circle, and the *vehicle* making the smallest circle of all; in short the animals cover a broad path, not a single line. Hence they could not possibly use a narrow rut.

The tractive force employed was evidently human, as suggested by Sir T. Zammit. The builders of the megaliths had been using large gangs of men for hauling the stones, and the change from stone to waggon was simple. The men would haul on a number of ropes and spread out fan-wise, so not wearing tracks with their feet. One correspondent has denied the use of ropes to the megalithic builders, but the employment of strips of hide is so simple and obvious an idea that it must have occurred at a very early period, probably antedating the use of vegetable fibres. In South Africa the Dutch farmers used until recently in place of 'trek chains' tow ropes made of untanned hide that would safely take the pull of 18 oxen.

If Sir Themistocles Zammit would give more exact details of the ruts, with dimensions taken at a large number of places, both on the straight and especially at curves, giving the radius of the curve in each case, and the depth of the ruts, it should be possible to calculate the size of the wheels and possibly the length of the waggons.

BRITISH PEARLS

The following account is taken, by permission, from the *Manchester Guardian Weekly* (7 July 1933).

'Only occasionally is the pearl-fisher to be seen at work in our British rivers today. Through force of circumstances he is becoming a rare bird, and moreover, at the speed at which we flit through the country now, that figure in mid-stream, handling a rod and with what appears to be a creel about his middle, is easily and naturally mistaken for an angler. It is only on closer acquaintance that these adjuncts of fishing become something interestingly different. It is to be feared, too, that if you saw a pearler and pointed him out to your fellow-passengers the tale would be received with doubt, for it is not generally known that some of our northern rivers, along with streams in Wales and Ireland, but more especially in Scotland, carry a pearl-bearing fresh-water mussel. And fishing for these pearls is an ancient British industry. Tacitus mentions the British river pearl; so does Pliny; there is reference to it in the *Faerie Queene*.

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‘ The industry persists today, although the rewards are unusually poor ; persists partly because there is a sort of family tradition associated with it, similar to that in the fishing industry and in the cotton trade. The man whom I found at work in a quiet stretch of a little-known northern stream told me he had been at it all his working life, following his father, who had followed his father. This, the grandfather’s time, would coincide with a brisk boom in river pearls that sprang up about 1860. Prices rose, and as a result there was an immediate descent upon the rivers, particularly the Scottish rivers, by people never before associated with pearling. It had disastrous results. Destruction of fresh-water mussels went on on a grand scale, and the shallows became virtually unproductive.

‘ Something of the kind happened again in early post-war years, It was marked on this occasion by the extensive use of motor-cycles to cover a wide area of rivers, so that destruction of mussels through intensive search went on on a mass scale. In the result the boom may be said to have killed itself, and many rivers and many Scottish burns were virtually cleared of all their fresh-water mussels.

‘ The Scottish rivers that yield the pearls are the Spey, Tay, South Esk, Doon, Dee, Don, Ythan, and the Forth leading them all ; in Wales the Conway, with two kinds of pearl-bearing mussels, is an easy first. The pearling rivers of England appear to be confined chiefly to the North Country, with the Cumberland rivers relatively prolific. Pearls from British rivers figure among the Crown jewels, and tradition has it that one such pearl was given by Sir Richard Wynne, of Gwydir, to Catherine, wife of Charles II.

‘ The pearl-fisher’s outfit is simple but interesting. It includes the usual type of waders. His rod is little more than a long stick, with a prong at the end for lifting the mussels. The most interesting item of his outfit is a sort of view-finder. This is a cylindrical affair of sheet tin, something like the domestic lading can. The bottom of this, regarding it as a lading can complete with handle, has been knocked out, and a circular piece of glass has been fitted in its place. The pearler dips this glass-covered end below the surface of the water and inspects the river bed. The mussels he thus finds he spears with his pronged stick, and his catch is transferred to a bag or sack slung about his middle. When his catch is big enough he returns to the river bank and begins the work of opening up and inspecting each mussel. It is a brief examination. The thumb is run round inside the shell, and any protuberance is removed for closer examination. The discarded

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mussels are returned to the river. Finds are rare in relation to the mussels opened and mussel destruction is great. As a trade it is highly speculative and seems to rank a degree or two below casual work'.

THE WEST KENNET AVENUE, AVEBURY (PLATE VIII)

It is generally known that the West Kennet Avenue, as it is usually called, led from the double concentric Stone Circles on Overton Hill, destroyed in 1724, to the Great Circle of Avebury. The Avenue stretched for just over a mile and followed a somewhat tortuous course governed by conditions of gradient, and possibly also by considerations of water level.

The Avenue originally consisted of 200 stones set in pairs at an average distance apart of approximately 79 ft. longitudinally and 49 ft. transversely. No part of the Avenue had ever been scientifically excavated, and it was decided this year to commence operations with the primary intention of ascertaining the exact line of the Avenue by uncovering the holes wherein stones that had disappeared had originally stood, with the secondary purpose of gleaning any possible information as regards the dating of the erection of this part of the megalithic monument, Avebury, from incidental finds.

The site selected was a field on the eastern slope of Waden Hill, some 500 yards in length near the centre of the course of the Avenue wherein eight fallen stones were still visible, as well as one stone which had never fallen and another which had been re-erected in 1912 by Mrs Cunningham, who had also in 1930 excavated the site of the Overton Circles. Excavations commenced early in April, and it was intended to allot three seasons' work to the uncovering of this section of the Avenue. As a preliminary, 15 cuttings were plotted, each of 100 ft. longitudinally by 80 ft. transversely, and it was decided to commence on cutting v, counting from the south end of the field and to proceed northwards up to and including cutting ix. It had been the original intention to close down for this season in June, but owing to the nature of the results which early manifested themselves, an alteration of plans was made, as it was considered desirable to excavate as far northwards as the extremity of the field, leaving cuttings i to iv for 1935. It had always been the intention of the excavators to re-erect any fallen stones or stones which might be discovered buried beneath the surface, in their original stone-holes, were such found, and this work, at the time of writing, is proceeding synchronously with the continuation of the

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excavation ; one fallen stone having already been re-erected as well as one found buried, the previous existence of which had not been suspected. In all, including those belonging to fallen stones, eight stone-holes in line have been uncovered on the eastern side of the Avenue and eleven on the western side, this leaving one stone-hole only unaccounted for, despite the most careful searching over the entire possible area where it might have been expected to exist. This failure may possibly be accounted for by the fact that the soil above the undisturbed coombe rock, which is the geological formation at this point of the Avenue, is unusually deep in the vicinity of the probable position of this stone-hole, and it may be that the stone, when originally erected, did not penetrate the subsoil, and consequently left no identifiable impression. Apart from the stone-holes, five buried stones, including the one now re-erected, have been discovered, and these also will in due course be erected in their original positions, while it is confidently anticipated that further buried stones may come to light as the work proceeds northwards, before the termination of this season's excavations. On three of these stones were discovered markings, which would appear to represent incised ornament, although it is, at the time of writing, too early to enter into details of this extremely interesting feature. It will not be out of place, however, at this stage, to stress the fact, which would appear not to be previously recorded or even observed, that the stones, not only of the West Kennet Avenue but likewise of the Circles of Avebury themselves, are not 'rough unhewn blocks of sarsen' as they have frequently been described, but that they have been carefully dressed and prepared prior to erection, and thus treated, moreover, prior to transportation to their present site, in contradistinction to the practice at Stonehenge.

From stake-holes found actually within or in the vicinity of certain but not all, of the stone-holes, as well as from the impressions left by supporting barks of timber, considerable information has been obtained as regards the original methods employed in the erection of the stones. Ten post-holes have also been discovered with the cores of their original timber uprights still clearly discernible, and one similar hole without any signs of carbonized wood within it. It is extremely doubtful, however, if not indeed improbable, that these post-holes had anything to do with the erection of the stones, although it would be premature to say anything definite upon this point before the end of the excavations. The suggestion that these holes were not connected with the erection of the stones and may, indeed, not even have

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been contemporary therewith, is based upon consideration not only of their position but likewise of the fact that they are localized within a relatively small area, beyond which, at any rate to the northwards where the coombe rock changes to middle chalk, they are nowhere to be found. It would appear more probable, therefore, that these post-holes represent the remains of a habitation-site, which suggestion receives colour from the discovery in their vicinity of a flint industry of a type totally distinct from that from the well-known neolithic site of Windmill Hill a mile and a half to the northwest. The finds of pottery associated with this flint industry served to date it satisfactorily, such pottery being typically Neolithic B or, as it has sometimes been termed, Peterborough ware, which in this district represents the secondary occupation of Windmill Hill. It is interesting to observe that not one shard of Neolithic A, or the so-called Windmill Hill ware, has been found during these excavations.

As regards Foreign Stone, two finds of considerable interest occurred ; both consisted of parts of broken polished axes and both have been definitely identified after microscopic examination as being formed of the well-known augite-granophyre from Graig Llwyd, which only occurs at Penmaenmawr in North Wales. There are only three recorded instances of specimens of this rock being found outside Wales, and one of these was on Windmill Hill at a depth equating it, as regards stratification, with the pottery of Neolithic B type, which pottery, it should be recollected, has also been discovered recently at one site in Anglesey, itself not far from Penmaenmawr.

Assuming that the theory of the habitation-site is correct, such a settlement can hardly have existed after the erection of the Avenue, and the date of the monument might, therefore, be taken to be Neolithic B, or later, were other confirmatory evidence not forthcoming. This, however, is now available in the form of burials at the bases of two of the stones which were discovered buried beneath the surface. In both cases the burial was on the east side of the stone, but in one case on the outside of it regarded from the centre of the Avenue, and in the second on the inner side. In the former case the grave was separate from the stone-hole and consequently need not necessarily have been contemporary. In the latter case, however, there can be no question at all but that the burial took place at the same time as the erection of the stone. With both these interments beakers were found. In the first case the bones had been scattered and much damaged by whoever buried the stone. In the second case, however, the digging

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of the pit for the burying of the stone had cut through but not wholly destroyed the grave, and the skull, hands and upper portion of the spinal column was fortunately left undisturbed *in situ*.

The excavations continued into August, and re-erection of the stones will proceed until completed; the work both of excavation and re-erection being recommenced next spring.

ALEXANDER KEILLER.

FAYUM PAPYRI.

A large haul of papyri has been made in the Fayum by an Italian expedition. The following account is reprinted, by permission, from *The Times*, 26 May :—

‘The papyri discovered by Dr Bagnani and Professor Vogliano at Teb-Tunis, in the Fayum [referred to in *The Times* of May 7], are, in the opinion of many scholars, the most important collection recovered by an archaeological mission for the last 30 years. They consist of three separate groups :—

(1) Literary texts, chiefly of dramatic authors, which were found in an old rubbish-heap in the main residential street of the Roman town. The identifications so far made are subject to reserve, but it is presumed that the texts include portions of Euripides, Menander, and perhaps some of the Old Comedy. Of prose works there are three columns of an anthology, in which are collected works of the most various description. An interesting detail of Greek literary history is given by the subscription of a hitherto unknown work of Apollodorus, the Athenian grammarian, which dealt with Homeric criticism.

(2) The largest group is formed by the texts found near the Teb-Tunis *grapheion*, or public record office. A large number of documents from the *grapheion*, which were no longer considered to be useful, were evidently dumped in the cellar of a neighbouring house. These documents, which date from the second century A.D., number about 1,000, and are extraordinarily interesting. Most of them refer to lawsuits. Curiously enough, the great roll with the commentary on Callimachus [mentioned on May 7] was found mixed up with these legal documents. Possibly the clerks in the record office earned extra money by copying literary texts in their spare time, and this roll was thrown away because it was damaged and hence unmarketable.

(3) This group consists of old papyri taken from public or private offices, which had been used to wrap up crocodile mummies. The documents in question belong to the Ptolemaic age; so far as can be seen they are accounts and legal rescripts’.

Recent Events

The Editor is not always able to verify information taken from the daily press and other sources and cannot therefore assume responsibility for it.

It is reported that a Greek textile factory has been discovered at Stobi in Yugoslav, Macedonia, and is being excavated by Professor Petrovitch of Belgrade. (*Star*, 1 June).



An Irish crannog, excavated by the Harvard Survey directed by Dr Hencken, has yielded evidence of 'some obscure pagan foundation rite' in the form of two human skulls, buried beneath the lowest layer. The settlement was founded in the first century of this era. Traditions of this practice lingered on far down into historical times. (*Manchester Guardian*, 29 May; compare *ANTIQUITY*, June 1934, p. 225).



One hoped that the sentimental critic of excavations was extinct, and certainly his futile voice is far less often raised nowadays than formerly. The excavation of Maiden Castle near Dorchester, now in progress, has, however, drawn from him a few faint screams. To his complaint that the turf will be ruined it may be retorted (by those who know) that the turf of Maiden Castle is not the real down turf, because (1) the whole of the interior has been extensively ploughed (2) the ramparts were infested by rabbits until these were exterminated by the Office of Works. Also, as Lt.-Colonel Drew points out (*Daily Telegraph*, 30 May), Maumbury Rings, excavated 1908-13, now shows 'not a trace of the cuttings'; nor will Maiden Castle in a few years' time.



It is always the scientific excavator who is singled out for abuse by these people, because at bottom they are obscurantists and mystics, who prefer their own vague imaginings of what might have been to the revelation of reality. Where were they when the virgin turf of Hod Hill was ploughed up about 1860? when the Army first descended upon Salisbury Plain? when the Stonehenge Cursus was ploughed up

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and obliterated during the war? Why has not one voice been raised in defence of Bokerley Dyke whose splendid flanks have been made raw and turfless by a plague of rabbits? There is plenty for the sentimentalists to do if they really want to be useful, but they don't; they merely want to annoy.

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The following letter from Mr Kenneth Spence, Honorary Secretary, Lake District National Reserve Committee, appeared in *The Times*, 5 February 1934. 'The report of the National Park Committee was published nearly three years ago. It contained alternative recommendations for the setting up of either an executive or an advisory committee for bringing about the desired end of the formation of one or more National Parks in Great Britain. The outlay for alternative No. 1 was £100,000 for a period of five years, for alternative No. 2 £10,000 over the same period. Nothing has been done to implement this report or carry out its recommendations. The promise of the Government to give £50,000 for the Codex Sinaiticus gives us hope that they are now in a position to carry out the recommendations of their departmental committee, and we sincerely trust that steps will be taken in the immediate future to put the recommendations of the committee into being, with a strong hope that they will favour the first alternative'. The following extract from *The Times* (16 February) gives the answer:—'SIR E. HILTON YOUNG, answering Mr MANDER, who asked whether, in view of the improved financial condition of the country, he would consider the advisability of making a grant in accordance with the recommendations of the National Park Committee Report, said:—I have considered the matter and regret that I cannot hold out any prospect of a grant at the present time'.

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As the sponsor of one of the areas accepted by the National Park Committee (that of the South Downs of Sussex), the Editor of *ANTIQUITY* naturally hopes that something will be done to carry out the recommendations. What are the sentimentalists doing to forward the project? Here at least is a scheme which would give pleasure to thousands and preserve amenities and wild life from spoliation.

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The Peruvian Government has made a grant of about £30,000 to provide the city of Cuzco with public works, found an Institute of

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Archaeology, restore the Inca monuments and conduct scientific excavations in the surrounding region. (*Ill. London News*, 7 April, illustrated by air-photographs of ancient sites).



Dr Aleš Hrdlička, accompanied by a number of volunteer students, left Washington on 11 May for a further season's work on Kodiak Island, Alaska. Several seasons have already been devoted by Smithsonian expeditions, of which Dr Hrdlička has been in charge, to the examination of sites on this island. The results have shown that it was at one time thickly populated and was in all probability a stepping stone in the peopling of America by migrants from Asia. (*Nature*, 9 June).



A diviner who believed that gold treasure lay under the ruins of Viroconium, the Roman city near Shrewsbury, was permitted to excavate at a spot where the divining rod appeared to give the most pronounced indications of metal. A stone weighing half a ton had to be removed, and then digging to a depth of six feet gave a negative result. (*Birmingham Daily Mail*, 13 April).



The claim that Cenn Cruaich, the name of the famous stone on the Hill of Tara, is the Gaelic equivalent of the word Pennocrucion has been made by a writer in *Revue Celtique* (1895, xvi, 36). It raises interesting problems. What is the exact meaning in combination of the two words which mean 'head' and 'mound' respectively? As a place-name the word occurs at least twice in England, at Penkridge in Shropshire and Pentridge in Cranborne Chace, Dorset.



An article on the archaeological interests of the Chinese in quite early days, and its revival on a scientific basis under the direction of Dr J. G. Andersson, was published in *The Times*, 2 May, p. 15, by Professor W. Perceval Yetts, who states that the first recorded instance of a museum in China is one set up in Nanking towards the end of the 5th century A.D. by a son of the reigning emperor. An illustrated catalogue of bronzes was compiled about 1092 and an inventory made in the 12th century is extant. Dr Yetts also published an article on Chinese glass in *Illus. London News*, 12 May.

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The visit of Sir George Hill, Director of the British Museum, and of Sir Charles Peers, late President of the Society of Antiquaries, to Cyprus in order to examine its ancient monuments is reported in *The Times*, 5 May, p. 11. One result of their mission, and of the interest of the present Governor of Cyprus, will be to rescue the monuments from the scandalous condition into which they have been allowed to fall. Comment on their preservation is made in our editorial notes.



The bridge which carried Stane Street over the river Arun near the Roman station of Alfoldean, Slinfold, Sussex, has been located by Mr S. E. Winbolt, who under most favourable conditions was able to examine the site and the wooden piling. (*The Times*, 30 May, p. 19).



Recent discoveries of Roman London are recorded in *The Times* 31 May, p. 11. The most important was on a site in Jewry Street when for the first time was found a deposit of pottery under the foundations of the Roman wall where it crossed a hitherto unrecorded stream.



A full account of the extraordinary hoard of Sumerian statuary found at Tell Asmar (see also ANTIQUITY, June, p. 226) by Dr Henry Frankfort, Director of the Iraq Expedition of the Oriental Institute of the University of Chicago, has been written by him for the *Illus. London News*, 19 May. The statuary is dated 3000 B.C. and is the first collection of Sumerian cult-figures found. The figures were actually worshipped in the Temple of Ab-ù at Tell Asmar. Dr Frankfort also writes in the *London News* (9 June) an account of the site at Khafaje, about 12 miles from Tell Asmar, where another great find of Sumerian sculpture has been made.



Work at Salmonsbury Camp, Bourton on the Water, Gloucestershire, was resumed in August, the original entrance on the north side along Bury Bank being excavated. Last year three hut sites were opened and yielded a number of finds of pottery, brooches, and iron and ivory objects. With the pottery were fragments of a vessel said to be 'probably unique' in England. It has a series of fine vertical

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ribs made in imitation of a metal vessel. It is dated to the beginning of the first century A.D.



Sir Flinders Petrie reports (*The Times*, 14 June, p. 12) on the season's work at Gaza, where he cleared about 4 acres along the river side and found over 200 haematite weights as evidence of the trade of the port. Among a large number of gold ornaments were plaques of the Great Mother goddess; ear-rings of granular work; toggle pins for fastening cloaks. They were published in *Illus. London News*, 16 June.



A scientific mission to the Tassili-n-Ajjer, a region northeast of the Hoggar Mountains in the Sahara, reports a number of rock paintings of animals—elephant, giraffe, rhinoceros and oxen—which must have water, thus showing that when the region was inhabited it had a humid climate. (*The Times*, 14 June, p. 15).



The Wellcome Archaeological Research Expedition has been excavating at Tell Duweir, in South Palestine, believed to be the site of Lachish, and the Director, Mr J. L. Starkey, reports finding ostraka with a similar script to that discovered by Dr Grant at Beth Shemesh only 20 miles away. The letters appear to be based on the Egyptian Hieratic script of the 16th century B.C. (*The Times*, 9 June, p. 13).

Dr Theodore Gaster, in a letter to *The Times* (12 June, p. 10) states that he had arrived at a tentative and approximate translation of the inscription. Further letters by Dr Alan H. Gardiner and Dr F. Melian Stawell were printed in *The Times*, 13 June, p. 12 and 23 June, p. 8, and a table showing the progress made in translating the inscription is given 25 July, p. 15.

Reviews

ROYAL COMMISSION ON HISTORICAL MONUMENTS, ENGLAND. An Inventory of the Historical Monuments in Herefordshire. Vol. II: EAST. *H.M. Stationery Office*, 1932. pp. xxxvi, 266, with map, plans, and 190 plates. 30s.

The area covered by the second volume of this Inventory includes, in addition to the three hundreds of Broxash, Radlow and Greytree, east of the Lugg and the Wye, the eastern half of the hundred of Grimsworth, between the two rivers, and a few out-lying parishes, chiefly on the borders of Gloucestershire and Worcestershire. Its monuments are as a whole less interesting than the remarkable series described and illustrated in the previous volume, and their merits are of a somewhat different order. While the seventeen churches distinguished as 'especially worthy of preservation' exceed by one the number selected in Hereford and the southwestern hundreds, there is nothing in the district which compares from the architectural point of view with the splendid presbytery and transepts at Abbey Dore or the twelfth-century churches at Kilpeck, Moccas and Peterchurch; and the large and handsome church at Ledbury, with its beautiful fourteenth-century north chapel, is less worth a special pilgrimage than the peculiarly attractive church of Madley. In medieval military architecture, again, the district is wholly deficient, and its only traces of religious foundations, apart from parish churches, are the hospital of St. Katharine at Ledbury and the chapel of the preceptory at Dinmore.

On the other hand, while it has few of the motte-and-bailey earthworks to show which are plentiful further west, its early earthworks, conspicuous among them the hill-top camp on the Herefordshire Beacon, are of a richer and more varied character, and it contains one Romano-British site of exceptional interest at Kenchester, the *Magni*, *Magnae* or *Magna* of the Antonine Itinerary. Its earlier churches are not without interest: Castle Frome, with a square chancel, and Holmer, with continuous chancel and nave, are complete twelfth-century fabrics, Fownhope has a twelfth-century tower between nave and chancel, and the foundations of an apse have been discovered at the end of the twelfth-century chancel at Tarrington. Late Romanesque doorways are numerous, and, amid much fine sculpture of the period, the tympanum in the west wall at Fownhope and the font at Castle Frome deserve special mention. Of the larger churches, Bromyard and Ledbury, both important ecclesiastical centres, and Ross contain much work of the thirteenth and fourteenth centuries, and Ledbury in particular illustrates a process of reconstruction and enlargement which, beginning late in the twelfth century, was completed in the fourteenth. The imposing church at Bodenham is a good example of the fourteenth-century rebuilding of which there is so much in the county, though its detail is plain and without special local characteristics. Bosbury, which, like Ledbury and some other Herefordshire churches, has a detached tower, is a large aisled church, mainly of the later years of the twelfth century, the piers of which have deeply scalloped capitals of the transitional type familiar in the West of England. In the sixteenth century, a vaulted chapel was built at the east end of the south aisle,

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and the church has further attractions in its tall rood-screen with mullioned openings and the elaborate Elizabethan monuments in the chancel. Several churches, as Tarrington and Weston Beggard, contain good fourteenth-century monuments and wall-recesses; there are numerous monuments at Ross, the earliest of which is the table-tomb of William Rudhall (1530), with much sculpture; but the best series in the district is at Much Marcle, where the oak effigy of a civilian in the south aisle is justly famous. The beautiful Grandison monument in the chancel, with the drapery of the effigy falling over the end of the tomb, a somewhat later table-tomb with male and female effigies, and the mid-seventeenth-century tomb of Sir John Kyrle and his wife in black marble and alabaster, are works of art such as few churches possess. There is not much ancient stained glass within the area; but the fifteenth-century east window at Ross, the well-known fourteenth-century window at Credenhill with figures of St. Thomas of Canterbury and St. Thomas of Hereford, and some glass of like date at Brinsop are exceptions.

Examples of domestic architecture are plentiful, chief among them Brinsop Court, a moated fourteenth-century house of stone with later timber-framing. The timber-framed house is characteristic of the district, and no English town exhibits this type of dwelling to greater advantage than Ledbury. At several places there are small country houses of red brick and stone, built in the late sixteenth and seventeenth centuries: Hellens at Much Marcle is a striking instance of the earlier date. The destruction by fire of the large Queen Anne mansion at Stoke Edith has left merely the shell of the building; but wrought-iron balustrades of excellent design remain, and the stable building is intact, with pine-cone finials on the wooden uprights at the end of the stall-partitions.

It is needless to say that the variety of objects whose outstanding features have been briefly indicated here are described with the scientific precision and thoroughness which the executive staff of the Commission have brought to so high a pitch, and the summary information included in the Report of the Commission and the sectional preface leave nothing to be desired. Aesthetic appreciation and comments are outside the province of an inventory, but the numerous photographic illustrations bear witness to the beauty of buildings and the works of art which they contain, while the photographs of the Herefordshire Beacon and its camp do full justice to its picturesque merits. The plans of buildings are lettered and shaded with uniform clearness, and special praise must be given to plans of towns and earthworks which display not only minute accuracy but high artistic skill and an instinct for appropriate decoration. A. HAMILTON THOMPSON.

PALEOLITHIC MAN AND THE NILE VALLEY IN NUBIA AND UPPER

EGYPT: a study of the region during Pliocene and Pleistocene times.* By K. S. SANDFORD and W. J. ARKELL. *The University of Chicago Oriental Institute publications*, vol. XVII, pp. xvii, 92, with 43 plates, 1 map and 21 figs. 28s 6d.

This volume, the second of the Prehistoric Survey of Egypt and Western Asia, describes four years' field-work (1926-30). A coloured map summarizes the geological results; Pliocene and Pleistocene alluvia have been overprinted on the older geological deposits forming the solid substratum, and relief is indicated by contours at 200 metre intervals.

The region in question covers an area of 500 miles, from the neighbourhood of the

* Review translated by the Editor.

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second cataract to Luxor. The Nile flows first over crystalline formations, then over Nubian sandstones, until these pass beneath Upper Cretaceous limestones which the river traverses in wide deep gorges. Traces of the great Pliocene transgression, which brought the sea to a point 180 metres above its present level and converted the lower Nile Valley into a long and narrow estuary, may be found even as far south as Edfu and Kom Ombo. Above this they disappear; nor are the contemporary fluvial deposits to be found, and it seems that the denudation of the crystalline formations underlying the Nubian Sandstone above the second cataract does not antedate the Quaternary Epoch; for the Plio-pleistocene terraces of 300, 200 and 150 feet contain no crystalline rocks.

Traces of Man do not appear until the 100-foot terrace, in the form of Chellean hand-axes, formed usually by detaching large flakes from big pebbles derived from the same deposit flakes belonging to Clactonian industry. The principal site is at es-Siba'iyyah near el-Kalb, between Kom Ombo and Esna.

Except at Dihmit, above Aswan, where there is a sheet of alluvium at the relative height of 75 feet, the first big fluvial deposit below 100 feet is that of 50 feet containing an industry of smaller hand-axes, of more regular and flattened form, regarded as Acheulean by the authors. It contains discs also. There are three main deposits, at Ashkit near Wadi Halfa, at el-Kalb and at Kom Ombo. The two lower terraces (30 feet and 10 feet) contain, at any rate the lower of them, numerous Mousterian implements (Levallois industry).

But climatic changes were in operation, the pluvial regime which had marked the Pliocene and Pleistocene gradually gave place to semi-desert conditions, first in Nubia, at the end of the Acheulean, then in Upper Egypt, during the Mousterian. Then were deposited the micaceous brick-earths which cover the Mousterian terraces and which rise gradually until at Wadi Halfa they reach a relative altitude of 100 feet. The deposition of these brick-earths is connected with a profound change in the hydrographic system of the Nile. Their origin is, in fact, almost exclusively Abyssinian, whilst the alluvium of the terraces was mainly of local origin. At their base these brick-earths still contain Mousterian; higher up appears an industry which is typologically allied, the Lower Sebilian. The author's figures do not allow us to estimate the reliability of this statement.

Finally erosion resumed its rôle and shaped the surface of these brick-earths where, ever nearer and nearer to the present river-bed but at altitudes which are higher up stream, there occur those Middle and Upper Sebilian settlements which were first studied at Kom Ombo, by Vignard. At Dibeira West, almost on the Sudanese frontier, the Upper Sebilian seems contemporary with a Nile at 40 feet. At Edfu a surface work-shop occurs at 33 feet, and the river-level at this point was then probably below 20 feet. Additional support for the climatic considerations already brought forward is to be found in the absence of the Sebilian in the desert region between the Nile and the Red Sea. West of the river arid conditions apparently did not prevail until later.

Last comes an informative chapter on newly-discovered rock-sculptures in Nubia. The oldest occur above the probable level of the river in the Upper Sebilian. This is merely a *terminus a quo*.

The observations of the authors relative to the climate, characterized by a progressive desiccation from the Pliocene to the end of the Pleistocene, are apparently in disharmony with those of Miss Caton Thompson and Miss Gardner, who, as is known, from their masterly studies in Kharga Oasis concluded that there were alternate wet and dry

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periods. This contradiction is perhaps more apparent than real ; for if, on the one hand, erosion is not always synonymous with dryness, it is plain, on the other, that river terraces only represent disconnected moments of geological time, and that the information they provide about climate cannot be made to cover the intervals with awkward results.

Working in different country, upon alluvial deposits which in general are poor in archaeological remains and quite devoid of palaeontological ones, Messrs. Sandford and Arkell have squeezed the maximum of profit out of them. They cannot be blamed for not finding what was not there.

R. VAUFREY.

TRADE AND POLITICS IN ANCIENT GREECE. By JOHANNES HASEBROEK, translated by L. M. FRASER and D. C. MACGREGOR. G. Bell & Sons, 1933. pp. ix, 187. 7s 6d.

Hasebroek takes up a position, very much on Bücher's side of the half-way line, in between Beloch and Bücher, whose famous controversy has been conveniently summarized in H. Knorringer's *Emporos*, pp. 134-39. That is to say, though he agrees to a greater circulation of articles than Bücher, he favours agriculture and trade in agricultural products against industry and trade in industrial products of common use as the basis of economy in the periods of Greek history under consideration, the archaic and the classical. His differences with Bücher may be seen by a glance at pages v, 58, 79, 80, 90, note 5.

The contents of Hasebroek's writings have already been broadcast in several reviews of this book, its German original and its successor, as yet untranslated.¹ Furthermore, his views find support in Laistner's *Survey of Ancient History* (esp. pp. 118-127, 150-55, 283-93). So there is no need to repeat what is by this time well-known. Still, some points of method remain for notice within the limits of a review.

First of all, Hasebroek's use of archaeological evidence. Comments on history by archaeologists are liable to be in direct opposition to him. 'Corinthian wares, backed by the most powerful commercial system of the time' are announced by Payne (*Necrocorinthia*, p. 36). 'By the middle or before the end of the (sixth) century' Beazley says (*Attic Black-figure : a sketch*, p. 12) 'the Athenians had wrested this vast commerce (of pottery) from Corinthian and other competitors ; they held it for centuries ; held it unchallenged for a hundred years'.

Hasebroek's case against such notions, apart from his general economic arguments, is that trade in decorated pottery and the like was a trade in luxuries. In examining export trade the question he asks is 'Did it or did it not include articles of common everyday need ?' (p. 79) and 'decorated pottery' he says 'was an article of luxury (like the other commodities mentioned above), and there is no evidence whatever that it was in demand among the ordinary people' (p. 51, cf. p. 49). This is in accord with Shear's description of varieties of unexciting painted pottery found in the excavations in the Athenian Agora in 1933 as the sort of thing used by 'the average Athenian of modest means'. (In a lecture at the American School, Athens on 27 February 1934. At the time of writing these vases have not been published in *Hesperia*).

Good china is made at Worcester, but this does not make that city into an important industrial centre. Good china is not regarded as an index of economic prosperity today—

¹ cf. *J.H.S.*, 1929, pp. 108-9 and 1932, pp. 147-8. *C.R.*, 1934, pp. 15-16. *Times Literary Supplement*, 8 March 1934, p. 161. There has been an extensive press in Germany, including P.N.Ure in *Gnomon* 1929, pp. 220-6 (in English).

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nor indeed is any luxury at any time so regarded ; it is always the necessities which must be examined.

The quantity of pottery which has been found is apt, by reason of its volume in proportion to other finds, to throw observers off their balance. When we hear of large quantities of pottery described as all belonging to a particular phase of a style, it should be remembered that such a phase is spread over a period of years, so that archaeologically-contemporary vases may be actually by no means contemporary in the ordinary sense of the word. If it were possible to assign exported vases to their year of export those 'immense' quantities of which we are told would lose some of their immensity.

But Hasebroek falters a little when he deals with the results of excavations and spoils his case quite unnecessarily. He gives as the uses of vases which are found away from their place of manufacture (p. 70) : (a) containers for oil and wine in transit²; (b) decorations for tombs ; votive offerings ; (c) prizes taken home by the victor in some international contest, 'like the (later) Athenian "prize-amphorae"''.³

The supremely weak point here is the incompleteness of (b). 'Decorations for tombs' were not a special line like modern artificial funeral wreaths ; the paraphernalia put in graves included the kind of things which the dead would have enjoyed if they had remained alive (cf. Payne *op. cit.* p. 172 n. 1). And further, vases are found in the remains of houses as well as in graves and temples.

The necessary addition of vases for the home to Hasebroek's list in no wise invalidates his conclusion that 'vases were not exported as articles of everyday need' (p. 70). Nor would the conclusion suffer if two sentences on page 58 were modified : 'merchants who came thither (to Corinth) took away with them sometimes the products of Corinthian labour for sale abroad' ; 'itinerant merchants from time to time came and bought the products of Milesian workshops'. Luxury trade is not inevitably as casual as that.

A word is needed on a theory of Bücher's with which Hasebroek dallies ('considerable plausibility', p. 51, 'plausible', p. 70), though it is not essential to his argument. The theory is that vases were generally made where they have been found, similarity of design and the appearance of the same signatures on vases at places distant from each other being explained by travelling on the part of the craftsmen.

There is no doubt that some craftsmen did travel.⁴ But it is fantastic to regard as the work of wanderers the greater bulk of vases which are generally agreed by archaeologists to be exports. For one thing, the type of clay is a clue to origin,⁵ and by this objective criterion, quite free from any taint of subjective aesthetic, it is possible in many instances to establish the fact of vase export. And again, there was some degree of standardization, as Ure points out. (*Gnomon*, 1929, p. 222).

In referring to Xenophantos (p. 51, n.2) Hasebroek should have been more careful. We do *not* hear of this Athenian potter travelling round South Russia making and selling 'Attic' pottery. What we have is a lekythos,⁶ decorated with reliefs from Kertch, with an inscription on it saying that it was made by Xenophantos, an Athenian. The vase is of a type obviously made to suit local demand ; it is only Attic in that it was made

² On the view that this was the *main* use of vases cf. Beazley *op. cit.* p. 12.

³ For Panathenaic amphorae cf. Beazley in *J.H.S.*, 1931, p. 299.

⁴ cf. J. L. Myres, *Who were the Greeks?* p. 599, n.34 and the references there cited.

⁵ cf. Payne, *op. cit.* p. 265.

⁶ Hasebroek wrote 'krug' ; the translators write 'oenochœ'. It is sometimes described as an aryballos ! Hoppin lists it correctly in his *Attic Black-figure Vases*, p. 473 (with drawing). Cf. Waldhauer's 1914 guide to the Hermitage vases p. 114.

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by an Athenian. And as for Xenophantos wandering about South Russia, there can be neither proof nor disproof; the most that we are entitled to infer is that he did work in Panticapaeum. (cf. F. Courby *Les vases grecs à reliefs*, p. 150 n.2, and M. H. Swindler, *Ancient Painting*, p. 29).

Hasebroek's remarks at the end of the first paragraph on page 51 prompt the thought that if he had not been intent on making his metics' trail about so much, he might have refrained from calling Bücher's view plausible and have been a little less impetuous in dealing with the Xenophantos evidence.

And now Hasebroek as a political commentator. He is led astray by the terminology of Weber to speak of the ancient world as dominated by 'political' as distinct from 'economic' motives (pp. VII, 30, 103, 135). This is playing with words. He himself says that foreign policy was determined by the need for food and shipbuilding materials, and what are these but economic needs? He is entitled to say that Greek policy differs from modern policy in that it was not controlled by commercial motives, but he ought to have avoided the mistake of equating 'economic' with 'commercial'. The Greek and modern worlds alike are dominated by economic motives; the distinction between them lies in the difference in the form of the organization of mankind for the struggle with nature.

Hasebroek is, in fact, too naive and too prone to take political terms at their face value. Hence his judgment on the post-war world (p. 132). By failure to analyse the concept 'nation' and its concomitant 'balance of power', he reaches a conclusion which is from one angle unduly optimistic (the so-called League of Nations as 'a lasting achievement') and from another, unduly pessimistic ('there never will be complete and stable balance of power'), as if the Nation was the final political entity and mankind was somehow fated to be dragooned eternally in national armies.

But he can see well enough to penetrate the mists of Parnassian romanticism. After the sugary diet which is not seldom served out under the guise of serious historical writing, it is refreshing to find the tart remark 'the background and the basis of politics and economics in antiquity was *force*' (his italics, p. VII).

And again, he is on the right lines when he says (p. VI): 'the problem of differentiating between historical epochs is one which cannot be shirked'. That he follows out this principle in practice may be seen from the contrasts he makes between the periods he is examining and the Hellenistic period and from his plentiful references to modern and especially medieval history. It is only by such differentiation that it is possible to avoid misleading analogies with today, which not only distort the study of both ancient and recent history but are calculated to be of practical use on the side of reaction.

It is unfortunate that he fails to keep up the critical standard he set himself when he made these two judgments.

Be that as it may, we are under a debt to the alliance between 'Modern Greats' and 'Greats' which has produced this workmanlike translation. Is it too much to hope that this is a step in the direction of removing an anomaly which among English students is too often unpleasantly obvious; typically English, if you will—precise knowledge of detail combined with a blissful ignorance of the basic nature of the various periods of Greek and Roman history and of the distinctions between the ancient, medieval and modern worlds?

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⁷ Metics were not all as 'homeless' as Hasebroek represents (p. 43). The metics in the Athenian army in 431 B.C. (Thuc. 2. 31) were fighting for 'hearth and home' as much as any Athenian citizen, though this does not mean that their interest in the war was of the nature suggested by Cornford—struggle for markets and so on. (Thuc., *Mythistoricus*, pp. 20-1).

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MÉMOIRES DE LA DÉLÉGATION FRANÇAISE EN AFGHANISTAN. T. IV.
Les Fouilles de Hadda. By JULES BARTHOUX. I. Stupas et Sites. Paris: *Editions d'Art et d'Histoire*, 1933. pp. 213 with 198 illustrations and 7 plans. Price not stated.

L'OEUVRE DE LA DÉLÉGATION ARCHÉOLOGIQUE FRANÇAISE EN AFGHANISTAN (1922-1932). I. Archéologie bouddhique. By J. HACKIN. Tokyo: *Maison Franco-Japonaise*, 1933. pp. 79 and 61 illustrations. 3 yen.

As part 4 of his *Fouilles de Hadda* M. Barthoux has already published an album of illustrations (reviewed in *ANTIQUITY*, v, 134). The present volume gives a technical description of the sites in which the objects illustrated in part 4 were found, including also an account of the mural decorations. Of these latter the most interesting is an unfinished wall-painting, which shows us that the artist began his work by sketching-in his subject in red ochre.

M. Hackin's book consists of lectures given at Tokyo in the winter of 1932-3, and is an excellent summary of the larger, official publications. The principal sites dealt with are Hadda and Bamiyan. At Balkh itself, where it was hoped that important remains of Greek civilization might be found, the results of the Mission were disappointing. M. Hackin speaks of 'le mirage bactrien' and, quoting M. Foucher, reminds the reader that Marco Polo appears also to have been a victim of this same mirage when he writes of Balkh's 'beaux palais et maintes belles maisons de marbre'. A. WALEY.

BOROUGH AND TOWN: a study of Urban Origins in England. By CARL STEPHENSON. Cambridge, Mass.: *the Mediaeval Academy of America*, 1933. pp. xvi, 236 and 8 plates. Price not stated.

In this closely packed book, whose thesis is a modified extension of that of his article in the *English Historical Review* for 1930, Professor Carl Stephenson of Cornell makes an important contribution to the controversial literature which has grown up around the origins of medieval towns. Beginning with a critical summary of the growth of the controversy, he reveals himself quickly as a disciple of Professor Pirenne, to whom indeed the book is dedicated, and whose 'mercantile settlement' theory applied out of its continental context to the explanation of the really very different English phenomena underlies the whole argument. After a chapter in which the continental evidence is reviewed, he turns to England, and the thesis of the rest of the book may be briefly summarized as follows. Of direct survival of institutions from the Roman *civitas* to the Saxon *chester* he agrees that there is little trace and little probability, though exceptions may be found in the southeast, especially at Canterbury and London, and in one passage (p. 67) he rashly and somewhat paradoxically claims that both markets and mints in general 'had continued to exist in the Roman cities taken over by the Saxons'. But in any case the *burhs* built by both sides in the Danish wars made a break with the past whether they were established in Roman walled cities or on fresh sites selected for strategic reasons. But these *burhs* are to Prof. Stephenson, as they were to Maitland, essentially military and administrative centres. Their courts were the courts of territorial districts, and grew, if they grew at all, into the shire-moots of the Mercian burghal counties or into hundred courts of the West Saxon model, rather than into the familiar borough courts of self-governing medieval towns. Their leading men were a territorial aristocracy living on the produce of their fields, not a bourgeois community living on the profits of commerce. Between Saxon *burh* and medieval borough there is thus a great gulf fixed: and the latter grew suddenly and dramatically with the growth of

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international trade in the eleventh century and the influx of French merchants which accompanied the Norman Conquest. The *liber burgus* of the twelfth century has thus a new and different social and institutional background from the military *burgus* of the tenth: 'divorced from the origin of the borough, the origin of town life in England thus appears . . . a problem not of legal interpretation but of social history' (p. 214).

A detailed criticism of the institutional evidence on which this argument is based would here be out of place, though it is clear that Professor Stephenson has to minimize or explain away a good deal of obviously commercial legislation in the laws of Athelstan, Ethelred, and Canute, which shows the *burhs* already developing mercantile aspects. Readers of ANTIQUITY will however note with pleasure his insistence on the value of topographical and archaeological evidence in accounting for the growth of our towns, and attention will here be concentrated on this aspect: for while the author is the first to admit the tentative character of this part of his story, it may be doubted whether his attempt to fit the urban topography into his argument will really work. For if his theory is true it is clearly necessary for him to show the small size of the normal tenth century *burhs* and to find a general policy of enlarging them to include the new trading settlements in the twelfth and thirteenth centuries. But if, for example, Nottingham seems to be a good instance of this process, there are others that point to a different history. Thus at Oxford, though a case can certainly be made for the extant walls including an extension of an original *burh* which ran no further east than St. Mary's and Cat Street (p. 204), yet Dr Salter has made it abundantly clear that this hypothetical extension must have taken place well before the Norman Conquest, when the present line of the enceinte was already fixed.* Oxford would thus be a case of extension just at the period most inconvenient for Stephenson's argument. So too the suggestion (p. 195) that the ramparts of Wallingford and Wareham, which enclose an area of some eighty acres, larger, that is, than he thinks proper for an early *burh*, are for that reason likely to be of the twelfth rather than the tenth century at once collapses when it is remembered that in both cases an eleventh century church is placed actually on the ramparts themselves. Any theory of burghal origins has in fact to allow for *some* tenth century enclosures much larger than the fifty acre limit set by Professor Stephenson (p. 195) and for extensions before as well as after 1066. We may note too that in dealing with *chesters* his discussion of the development of York, Lincoln, and Gloucester suffers from a failure to appreciate the distinction between a Roman legionary fortress and a *colonia*, or the peculiar position of York as a combination of both. But if the facts seem so often selected to suit the theory, the topographical approach to these problems is far too important to be left in its present neglect, and Professor Stephenson is to be congratulated on making it an integral part of his story: and his skeleton urban plans are exactly the right type of illustration for this kind of study.

There are rather too many misprints to ignore in a work of this importance, and the following list makes no claim to completeness. *Dumnomorum* for *Dumnoniorum* (page 48, line 6); *stockage* for *stockade* (54, 21); *Southward* for *Southwark* (108, n.2); *henceford* for *henceforth* (125, 13); *placidis* for *placitis* (142, 19); *testimentary* for *testamentary* (149, 13); *under for unter* (158, n.5). On p. 194 the misleading form *Isca Silurum* for Roman Caerleon occurs. In a good many places the text is ambiguous or unnecessarily obscure: there are for example several possible interpretations of the

* Nor is Professor Stephenson right in assuming that the famous 'mural mansions' at Oxford were 'located along the ancient borough rampart' (p. 102). His account of this question is throughout unsatisfactory.

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sentence (p. 58, n.3) 'enclosures can only be made with square corners or rounded', and none of them would appear to be true. It is much to be hoped that this book will stimulate a qualified archaeologist to give us a topographical survey of the growth of our ancient towns: without an impartial presentation of these facts, as Professor Stephenson says, no theory of their origin can command consent. J. N. L. MYRES.

LURISTAN BRONZES IN THE UNIVERSITY MUSEUM. By L. LEGRAIN, *University of Pennsylvania, Philadelphia*, (London: Oxford University Press), 1934. pp. 20 and 25 plates. 8s 6d.

In the various discrete valleys of the mountainous regions to the north and east of Mesopotamia barbaric cultures grew up among tribes that were influenced by the riverine civilizations of Babylonia and Assyria but never themselves rose to the stage of urban life. Groups of relics, looted rather than excavated, from Armenia, Georgia, Azerbaijan, Kermanshah, and Luristan are giving us tantalizing glimpses of some of these peoples at uncertain moments in their long prehistory.

The Luristan bronzes, which have only become known in Europe during the last six years, constitute one such group. They are not only intrinsically attractive, but also interesting for striking resemblances on the one hand to early Sumerian and later Assyrian products, on the other to the animal style of the European Scythians. Unfortunately all come through dealers from native diggers who have ruthlessly plundered cemeteries and village-tells so that little is really known as to the origins of the objects. Legrain racy and critically summarizes that little knowledge and then gives a catalogue of a representative collection acquired by the University of Pennsylvania Museum—sixty-one bronzes, eight cylinder seals, some leaf-shaped arrow-heads and other stone implements. All the objects are illustrated by first-class photographs. Nowhere else can so good an idea of the prehistoric culture of Luristan be obtained at anything like such a modest price.

The majority of the bronzes could quite comfortably be dated between 700 and 400 B.C., the period to which the seals unambiguously point. But it is impossible to believe that all are so late. Archaism will hardly explain the resemblance of some daggers and axes to pre-Sargonic types from Ur (the most similar axe from that site by the way comes from a grave, that, though belonging stratigraphically to the 'early cemetery', might by its contents come down close to the Sargonid era). And the collection actually includes a bowl bearing a dedication to Sargon of Agade, c. 2525 B.C., while the British Museum possesses objects, said to come from the same region, which are dated by inscriptions to intervening periods down to 1100 B.C. This collection and others accordingly represent only fragments from a barbaric culture that must have lasted over two millennia. Closed grave-groups and stratigraphical observations would reveal the stages of its evolution or stagnation. In their absence the immediate task is to publish and describe what has been rescued. Everyone will be grateful to Legrain and the University of Pennsylvania for the manner in which that task has here been accomplished. (But a map would have been a help). V. G. CHILDE.

AN INTRODUCTION TO THE PREHISTORY OF CUMBERLAND, WEST-MORLAND AND LANCASHIRE NORTH OF THE SANDS. By R. G. COLLINGWOOD. *Trans. Cumb. and Westmd. Ant. and Arch. Soc.* 1933, N.S. XXXIII, 163-200. Five distribution maps, in black and red.

'The aim of this paper is to sum up, in the briefest possible outline, the present state of knowledge about the prehistory of our district; not with a view to completeness

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of detail or definiteness of conclusions, which would require a far larger treatment, but in the hope of providing a basis for discussion and a framework for research to be carried on by the Society's Committee for Prehistoric Studies. This Committee, it is hoped, will undertake a survey of our district's prehistoric remains which will soon render this paper obsolete'. In spite of this modest disclaimer we feel sure that the Introduction will find a place on the field-archaeologist's shelf beside the Inventory of the late Mr W. G. Collingwood, and be consulted as frequently. The present reviewer has in fact already so used it, to great advantage. It might be thought that an Inventory covers the ground adequately; but, while remaining essential for reference, it necessarily remains an unclassified collection of facts, or rather a collection of facts classified (in this instance) upon a topographical system. If one is working upon a certain type of monument only, with no previous knowledge of the district, it is not easy to select from amongst the items of an Inventory just those examples which one has to investigate. Much time will be lost—often whole days—in visiting sites which do not belong to the period one is studying. But when one uses the Inventory *in conjunction with* such an Introduction as this, one's labour is immensely lightened. One is told, by one who knows, which items have been certainly identified, which are doubtful and which are certainly *not* what they have been claimed to be. Thus tested in practice, Mr R. G. Collingwood's Introduction has already proved of great practical use to one field-worker, and it will be used by many others before it becomes obsolete. That it should do so eventually, as its author predicts, is inevitable; but it makes an advance, a stage of summing up preparatory to a fresh advance, and it will always therefore be gratefully remembered.

That it registers progress may be seen from the conclusions drawn by the author from the distributions mapped. The conclusion that 'our great circles [such as Long Meg and her daughters, see page 328 of this number] were built by seafaring people, coming from the south' (p. 177) is one of major importance; and there are others which have been reached, and could only have been reached, by the geographical method of enquiry. Here is a working hypothesis, based upon evidence, to be tested by excavation. (The discovery for example of pottery contemporary with the building of these circles would show the lucky excavator what were the cultural affinities of the builders).

One is tempted to prolong this review to an undue length, so many good things does the Introduction contain. It concludes with Suggestions towards a Policy of Research, subdivided under the heads of Office-work, Field-work, Excavation, and Publication; and an appendix on Surveying. The importance and vast scope of Field-work is well and justly emphasized, being defined as 'work done at the sites themselves by every means short of excavation' (photography might have been included). 'The study of a site is best undertaken by going there and trying to write a description of it, including every feature worth recording' (p. 194). This in itself is an admirable training in observation and in the use of words, and sometimes also in patience and fortitude under adverse physical conditions! A word might have been added—always write your notes, however abbreviated, on the spot itself (not even in a barn near it). This is trying in rain, snow and wind, and not easy when surrounded by swarms of flies and midges in the heat of summer; but it is essential if your notes are to be complete, accurate and fresh. The margin or back of a 6-inch Ordnance Map is, or should be, always available. It is not generally realized how much work there is to be done by merely *going and looking* at antiquities and recording the results. The whole work of all the Royal Commissions on Ancient Monuments is merely an elaboration of this method.

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The maps are entirely pleasing and adequate. By their austere economy they succeed in conveying their meaning to the reader, and what more can be asked? They condense a mass of facts and present them in a form that no verbal description can hope to rival; thereby illustrating the author's dictum that 'nothing ought to be verbally stated in the description which can be clearly shown by means of the plan'.

The length of this review illustrates another feature of modern research—that the important land-marks in progress do not necessarily, though of course they do sometimes, appear in the form of books. As often as not the best thing on a subject or a region is an article in the Transactions of the local society, such as the Inventory and Introduction.

O.G.S.C.

BRONZEZEITLICHE UND FRUHEISENZEITLICHE CHRONOLOGIE. Teil 4. Griechenland. By NILS ÅBERG. *Uppsala; Almqvist & Wiksells Boktryckeri-A-B.*, 1933. pp. 282 with chronological table. 30 kr.

Thirty years ago as a result of his excavations at Knossos Sir Arthur Evans put forward his division of the Cretan Bronze Age into three periods, Early, Middle, and Late Minoan, each of which was further subdivided into three periods. Since then the nine periods, and their distribution in the interval between about 3400 B.C. and 1200 B.C., have been accepted by every Aegean archaeologist. They are attacked by Dr Åberg in

Initial Date	Egyptian Dynasty	CRETE		GREECE		CYCLADES	
		Evans	Åberg	Evans	Åberg	Evans	Aberg
3,000	I	E.M. I		E.H. I		Early Cycladic	
2,680	IV-VI	E.M. II					
2,300	First Intermediate	E.M. III					
2,100	XI	M.M. I		E.H. III			
1,900	XII	M.M. II	M.M. II with all more primitive material	M.H. I	E.H.		Proto-Cycladic (Pyrgos)
1,700	Hyksos	M.M. III	M.M. III	M.H. II	M.H. I		Early Cycladic
1,580	XVIII	L.M. I	L.M. I	L.H. I	M.H. II		
					L.H. I		

the present volume as the result of less than two years' study; in his third volume, published in 1932, he even uses the conventional system to support a somewhat rash theory of the dependence of Crete on Egypt. The modifications which he now proposes are drastic. Middle Minoan II, and the mainland Middle Helladic I which corresponds to it, he proposes to date about 100 years later than is usually done, to the thirteenth rather than the twelfth Egyptian dynasty. Most of Early Cycladic, the island civilization

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generally supposed to be contemporary with E.M. II, he brings down to the M.H. period, making its latest products even overlap the L.H. I shaft graves of Mycenae. Finally he entirely discards the whole of the E.M. period and M.M. I, supposing that the Minoans arrived in Crete with their civilization already fully developed, and that the more primitive phases are degenerate developments, due in part to a different people, in South and East Crete.

These conclusions, startling as they are, cannot be hastily dismissed. Dr Åberg has a remarkable gift for assimilating material, and he brings a fresh and unprejudiced eye to the consideration of Aegean problems. The short chronology which he proposes would solve one of the greatest difficulties of European history, the gaps which exist in the Bronze Age chronology of such countries as Spain, Italy, and South Russia. The European evidence alone would almost compel a re-examination of Aegean dating.

The suggestion that the M.H. period is shorter than has usually been supposed receives considerable support from the shallowness of this stratum at Eutresis and Korakou, and from the homogeneous character of the material; but these considerations can at present hardly outweigh the synchronism of M.H. I with the older Palace at Knossos, which was first established by the excavations at Phylakopi. Incidentally Eutresis provides an exception to Åberg's statement that shaft-hole axes are not found on the Greek mainland. On the other hand Åberg's demonstration that much of the Early Cycladic material is contemporary with M.H. is entirely convincing, and though in detail the dates which he proposes may be modified by fifty or a hundred years (it is difficult for instance to believe that all the material from the citadel at Paros is really of the same date) it will henceforth be difficult to date such burials as those of Nirou Khani to the time of the first Pharaohs. Åberg however unduly depreciates the results obtained by the excavations at Phylakopi. The three periods on that site are marked by different orientation of the principal buildings, and the excavators stressed the fact that they do not imply cultural breaks. The analysis of pottery from the second excavation remains the most valuable guide to Cycladic dating; while it is Åberg and not the excavators who is responsible for the curious inconsistency in the spelling of 'Mycenaeen' on p. 115.

In the Cretan dating Åberg has two new theses. He is probably right in denying the existence of a lacuna between M.M. I and M.M. III in East Crete, a period during which it is usually supposed that the eastern palaces were entirely deserted. The lacuna however may be best accounted for by supposing that M.M. II, like L.M. II, is a purely palace style, a solution already hinted at by Evans in the first volume of the Palace of Minos. If this is the case it is no longer surprising to find identical objects in late M.M. I and early M.M. III deposits.

In denying the existence of an E.M. period however Åberg disregards both stylistic considerations and the evidence of stratification; a regular development can be traced in the pottery from Neolithic to Kamares, while at Knossos the three periods were clearly superimposed (*BSA*, x, p. 19). Moreover, the few Egyptian objects found in a definitely E.M. context suggest a date at least as early as the First Intermediate period for the beginnings of Minoan civilization (Pendlebury, *Aegyptiaca*, p. 114). Åberg is not at home with the Egyptian material; thus he states that lions first appear on scarabs in the eighteenth dynasty, whereas they are actually found on scarabs from the ninth dynasty onwards and are one of the commonest subjects on the button seals of the preceding First Intermediate period. Although scarabs with spiral designs are first common, as Åberg states, from the time of Sesostriis I, they occur sporadically from the fifth dynasty onwards; thus the design, Åberg fig. 501, is exactly repeated on a button of about the eighth or

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ninth dynasty (Petrie, *Design Scarabs*, pl. iv, 259). In fact the best evidence for the dating of E.M. is the remarkable similarity between the seals of that period and the buttons of the First Intermediate. Perhaps the same impulse that drove Syrians to Egypt about the eighth dynasty was responsible for the arrival in Crete of the first Minoan settlers.

Finally, although the short chronology solves many European problems, it raises a new set of difficulties for the historian of the Near East. The survival of pre-dynastic Egyptian types into the Cretan Bronze Age, such as stone vases (at Knossos and elsewhere) and block figurines of Naqada type (in the Messara tholoi) might be explained on the conventional chronology by supposing that such types continued to be produced in the Delta until their makers were driven out by Menes; it is less easy to suppose that they survived right through the Early Dynastic period without leaving any trace. Such survivals must warn us against Åberg's constant assumption that identical types, even of quite a specialized nature, may not have been repeated over a long period of time, especially if they had a magic value; thus fiddle-shaped idols are found in Cycladic tombs, in the Neolithic tell at Knossos, and recently by Frankfort in an archaic Sumerian deposit, which implies a time range on Åberg's chronology of about 1000 years. There will be an almost equally inexplicable gap between the Minoan culture and the Painted Ware culture of Tell Halaf which is probably ancestral to it, although the lower limits of the Tell Halaf ware are not yet sufficiently determined. Perhaps Åberg will now turn his attention to providing a short chronology for the Oriental periods.

The book bears some signs of hasty writing; few readers will agree in regarding as stylistic the resemblance between figs. 110 and 193, or figs. 196 and 197; but it will be welcomed not only for its revolutionary and stimulating suggestions but also for its valuable account of the Cycladic material, much of which was unpublished and inaccessible to English students; while those who have found the development of Middle Minoan pottery puzzling will be grateful for the interesting analysis of the Kamares style. Both the print and the illustrations are of a quality which should encourage students to buy and to read an outstanding contribution to Aegean archaeology.

C. R. WASON.

OLD AGE AMONG THE ANCIENT GREEKS. By BESSIE ELLEN RICHARDSON. *Oxford University Press*, 1933. pp. 376 and 27 plates. 24s.

In this age, when it is the tendency to focus attention on the very young, it is refreshing to turn to a nation who kept children in their proper place and paid due deference to their elders and betters.

Miss Richardson has made an exhaustive study of her subject, and seems to have collected almost every allusion to old age in Greek literature, and every representation in sculpture and terra-cottas, vases, gems and intaglios; though curiously enough, she omits the wealth of material to be found in the Hellenistic paintings. Starting from the literary side, she tries to discover what was the Greek attitude towards it, and decides that in its physical aspect, 'painful and unseemly old age' was always dreaded, and looked upon as a punishment second to death only; but to compensate, old people were always held in the deepest respect and affection, from the time of Homer when 'even mothers-in-law were held in esteem' down to Erinna, who paints a charming picture of old ladies with silver hair and golden thoughts. Moreover, the superior wisdom and counsel of the elderly citizen were much esteemed, and the duties which he was expected to fulfil in public life, in warfare, religion, and private life are dealt with

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fully. Following this, a detailed study is made of the treatment of old age by the great dramatists, where the conclusion is reached that Aristophanes' old men are all 'weak old dotards'. This is surely unjust, as these are often far cleverer than they appear at first sight.

The chapters on vase painting and sculpture are good and full, but would be improved by the inclusion of more illustrations, and long descriptions of works of art are apt to be both tedious and misleading; while in her enthusiasm the author sometimes brings in examples which do not depict old age at all.

The development of statues of the aged is traced from its rare and early appearances on the Olympia pediments and Boston slabs in the fifth century, when youth and virility were idealized, down to Hellenistic and Graeco-Roman times, when statuary was no longer religious but realistic in spirit. In dealing with portraits and busts, however, Miss Richardson makes the mistake of trying to deduce a man's character from his portrait, apparently forgetting that in most cases the bust was made a hundred years or more after the death of the original, and therefore represents only the idea of the artist, based on traditional features.

The book ends with a study of longevity among the Greeks, based on the evidence of over 2000 inscriptions, and although from these the author has calculated that the average expectation of life was only about 29 years contrasted with the modern figure of 57, yet there are numerous examples of both men and women who have lived to be over 100, and it must not be forgotten that these inscriptions are not universally representative.

The style is simple and direct, but occasionally marred by colloquialisms, such as 'sort of', 'very unique', and 'most unique'.

As a work of reference the book is valuable for the exhaustive index and appendices; but it is too much of a catalogue to be enjoyable reading. We are confronted with heaped helpings of raw facts, which, though of unimpeachable quality, are apt to be indigestible when taken in such promiscuous quantity and without the seasoning of a little apt theory.

ELEANOR DOBSON.

DE SENKVARTÆRE KLIMAVEKSLINGER I NORDEUROPA OG DERES BETYDNING FOR KULTURFORSKNING. By ROLF NORDHAGEN. Oslo : Aschehoug ; London : Williams & Norgate, 1933. pp. 246 and 79 figs. Kr. 3.50.

This book is divided into three sections, the first of which deals with the question whether Norway was inhabited during the last interglacial and glacial periods. The author brings a wide range of evidence from studies of topography, deposits, shore-lines, and the distribution of plants and animals to show that parts in the west and north-west of the country were comparatively lightly glaciated. It is possible therefore that this region did not sink so much under the weight of ice as did that nearer the Gulf of Bothnia. As the sea-level fell, according to Tanner, about 100 m., there may have been a considerable negative movement which would have exposed a good deal of foreland. Dr Nordhagen believes that there is support for the view that there may have been in this area biological continuity from the last inter-glacial period down to the present. He is inclined to think that this may even apply to mankind, and that 'the northern coastal Aurignacian culture (*i.e.* the Komsa) may be a relic from the last interglacial period'.

The second part of the book (pp. 122-184), consists of a summary of climatic change in North Europe during late-glacial, and post-glacial times. The course of the retreat

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of the ice and of the changes in the height of land and sea are also described. As Malmö flint has been found north of the Ra moraines the latter can scarcely be correlated with the Central Swedish moraines, nor with the Salpausselkä in Finland; they may belong to the Daniglacial or early Gotiglacial stage. Dr Nordhagen then goes on to review the evidence for changes of precipitation and temperature that has been obtained from studies of peat, tufa, marine and freshwater deposits, the distribution of plants, and pollen analysis, and to summarize the characteristics of the late-glacial, and post-glacial climatic periods.

The rest of the book is devoted to a consideration of the influence that these geographical changes must have had on the course of settlement and the development of culture. The Fosna culture, a coastal one like the Komsa, is ascribed to the Pholas stage of late glacial times; pollen analysis has shown it to be older than the Maglemose of Denmark. The author raises the question whether the Nøstvet and Limhamn cultures do not antedate the Littorina or Atlantic period. He also puts forward the suggestion that there may have been in pre-boreal and boreal times a meeting in the Scandinavian peninsula between an old coastal culture with Mousterian-Aurignacian roots and one or more culture-streams coming from the south, the youngest of these being represented by the Mullerup-Maglemose.

Dr Nordhagen considers the sub-boreal a period of great interest, and of much importance in the history of culture; but he points out that its history is a complicated one, and that there are many doubtful points to be cleared up. The climate was drier and the woods had become thinner. Settlements spread inland, and corn-growing, which was first introduced into Norway with the megalithic cultures, was further developed. Wheat was cultivated in Norway in the Bronze Age, and much millet or panic grass (*Panicum miliaceum*) was grown in Denmark, where present conditions are not suitable for it. The development of agriculture helped the colonization of inland areas by providing reserves of food for the severe winters.

In sub-Atlantic times there was an increase in precipitation of perhaps 200 mm. in parts of Norway. Erosion became more active and some peat deposits were sanded over. The establishment of the present birch zone in the Scandinavian mountains dates from this period. The change from sub-boreal to sub-Atlantic conditions is thought to have taken place in the North about 600 or 500 B.C. Many Iron Age remains rest on sub-Atlantic peat; one of the oldest of these, the Hjortspring boat, is dated about 400 B.C. The change seems to have been sudden, and it is possible that a memory of it was preserved by the references in the Eddas to Fimbul winter. Although winter temperatures may not have been much lower the increased quantities of freshwater would favour the formation of ice in the fjords. The long winters, dull wet summers, and occasionally late springs must have been disastrous to agriculture. Hasund has suggested that it was in the Iron Age that people in the North first began systematically to stable their animals and to store up hay and leaves for winter use. Iron Age sites are markedly less numerous than are those of the Bronze Age when followed inland or northward (see maps on p. 221). Along the coasts people could fall back on the contributions of the sea to eke out the food supplies during winter.

The history of climatic fluctuations in our era is briefly sketched. When sub-Atlantic times should be considered to end is uncertain. There appears to have been a definite improvement in Roman times, with a dry period about A.D. 300; this was followed by another increase in the rainfall about A.D. 400. If the last two changes affected England they might help to explain the course of colonization in the Fens. A

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wet period accompanied by cloudy summers and little evaporation would give rise to water-logged soil, rivers of high volume, and frequent floods, while during a dry period, like last summer, the rivers would shrink and much of the land might be cultivated. In the dry sub-boreal period the fens were fully exploited by the early Bronze Age population, but they have yielded very few Iron Age objects dating from wet sub-Atlantic times; in Romano-British times they again carried a large population, only to be avoided in pagan-Saxon times. The contrast between Romano-British and early Saxon conditions is very marked. It may be that these alternate favourable and unfavourable periods in the Fens are to be explained by movement of land or sea; but it may be worth while to enquire whether alternations of wet and dry periods would not have very similar results.

Much of this book deals with subjects that were discussed by Wright in *The Quaternary Ice Age*, 1914; but since that date a great deal of work has been done. Dr Nordhagen has gathered a large amount of information from half a dozen different sciences, and has presented us with a most interesting and stimulating synthesis. His book is a very good example of what can be done by co-operation between allied sciences. It only remains to add that if this excellent little book were translated into English and published at as reasonable a price as the original it would deserve a warm welcome in this country.

R. U. SAYCE.

RUSSIAN MEDIEVAL ARCHITECTURE. By D. R. BUXTON. *Cambridge University Press*, 1934. pp. xiv, 112, with 108 plates, plans and text-illustrations. 25s.

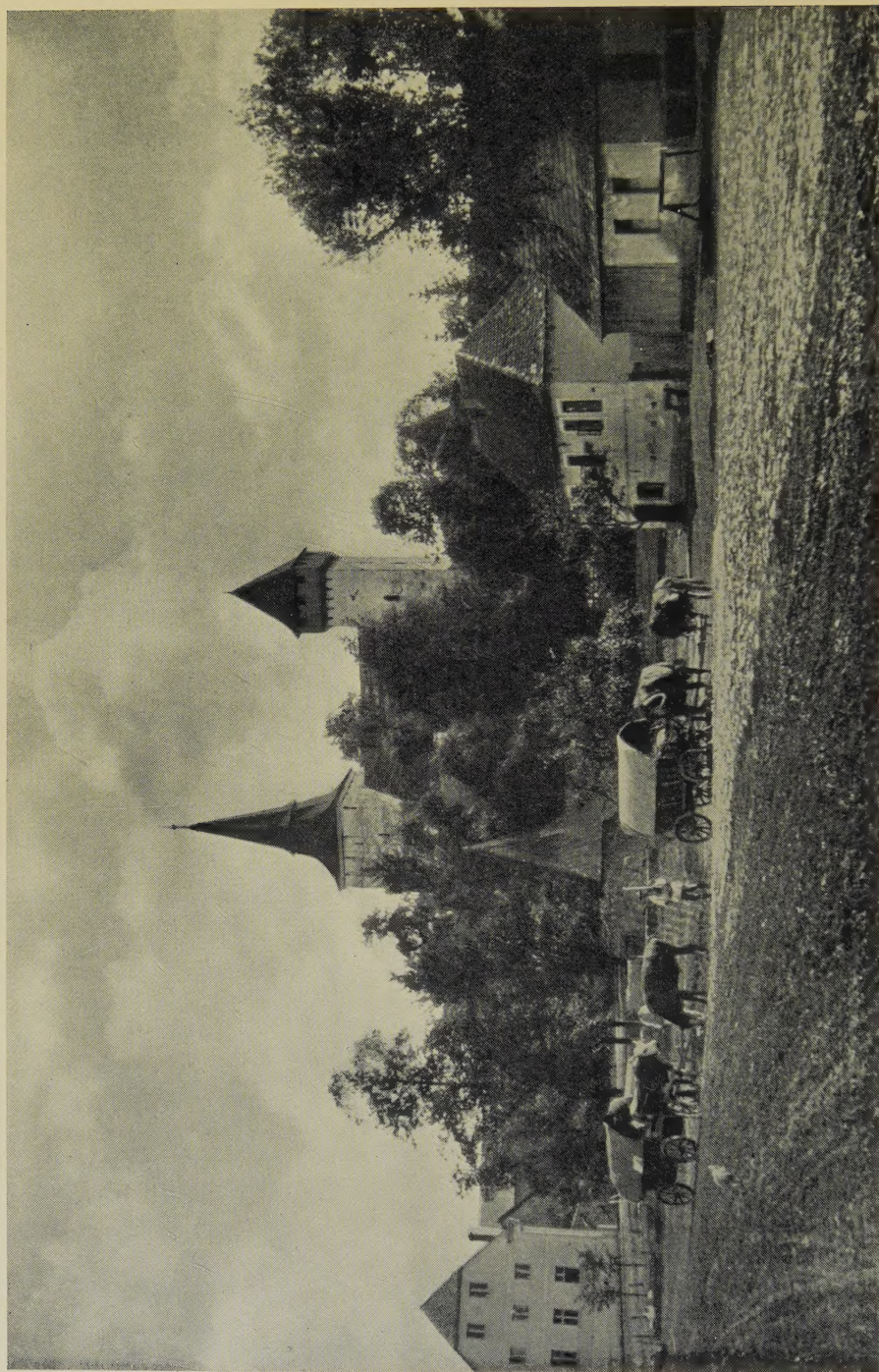
Mr Buxton has broken new ground in this pictorial survey of the medieval architecture of Russia. Apart from somewhat casual accounts of the churches of Kieff and Vladimir little or nothing has been written in Western architectural literature on the subject, and though we may conclude that the Russians at no time added anything appreciable to the history of architectural development, yet their buildings are in a high degree interesting as the authentic product of the greatest of the Slav nations.

It should be noted that the author continues his survey down to the Baroque, though the medieval period in Russia may be said to have terminated with Peter the Great. The book furthermore includes a survey of the churches of Georgia and Armenia, a subject which has occupied a prominent place in recent architectural literature.

That early Russian architecture is the direct offspring of the Byzantine has long been recognized, and 11th-century Kieff was acclaimed by contemporaries as 'the emulator of Constantinople and the fairest ornament of the Greek world'. Its glory however was short-lived and the capital was transferred in 1109 to Vladimir. Here there survives a remarkable group of stone churches which are perhaps the most interesting memorials of medieval Russia. The carved decoration is of extraordinary interest and has affinities not only with Armenia but also with the Romanesque art of northern Italy. The later Russian churches are more curious than beautiful, though the bell-tower at Yaroslav is dignified if ill-proportioned.

The book is illustrated by the author's own photographs which are both numerous and well-reproduced. We regret only that the author gives no exact references for his dating of the major examples, which would have added greatly to the weight of his conclusions.

A. W. CLAPHAM.



A TRANSYLVANIAN VILLAGE—HUNDERTBÜCHELN
Ph. O. G. S. Crawford